



PRINCIPAL CONTENTS



**Report on Burnley Egg-Laying
Competition, 1927-28**

Cider Making

Wangaratta Fallow Competition

Standard Herd Test—Quarterly Report

INCREASE PRODUCTION!

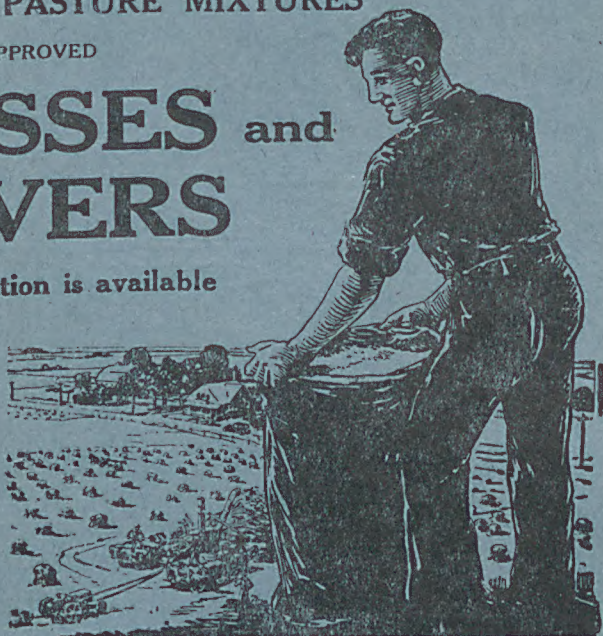
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THE JOURNAL

OF

THE DEPARTMENT OF AGRICULTURE,

VICTORIA, AUSTRALIA.

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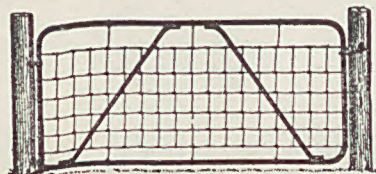
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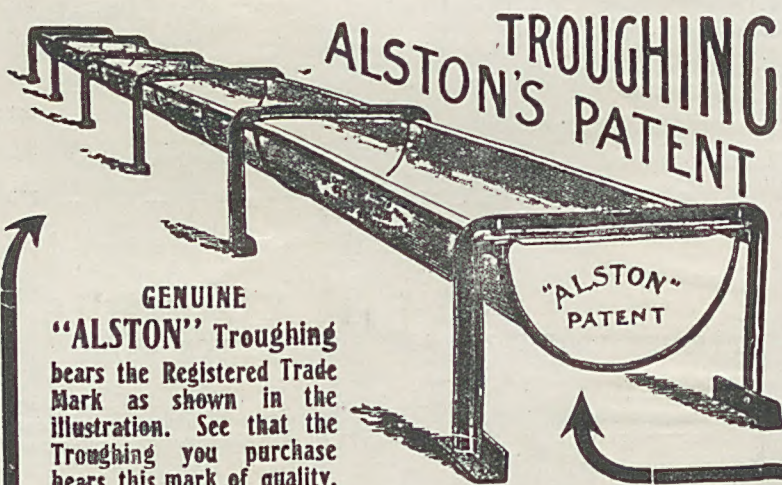
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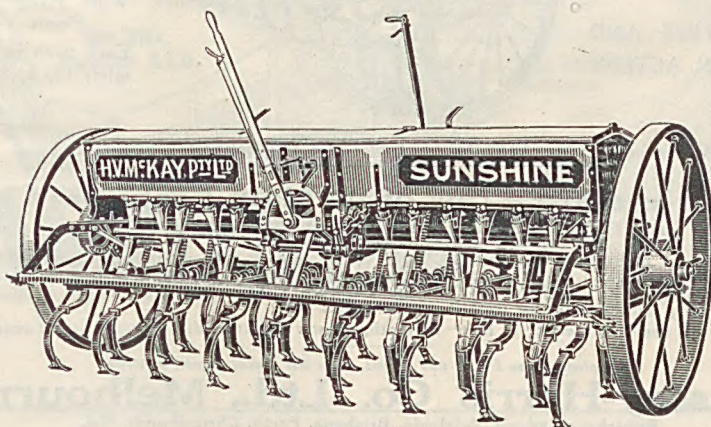
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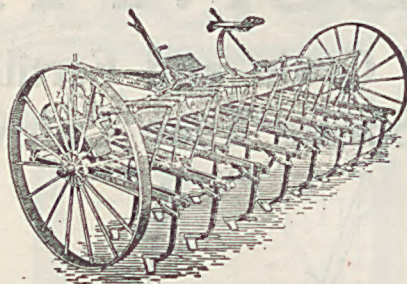
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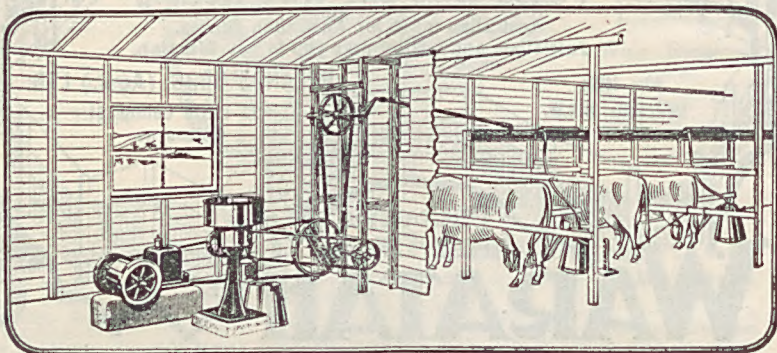
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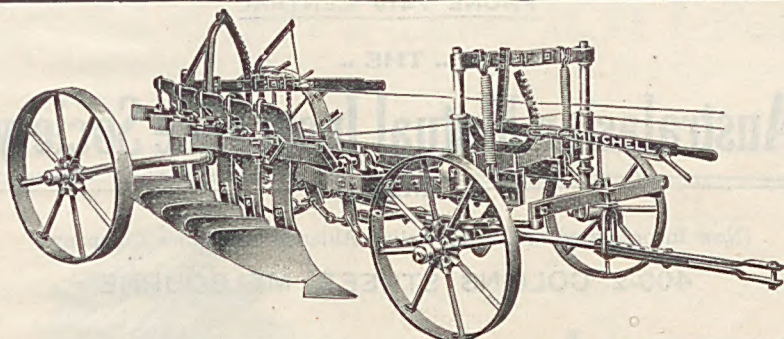
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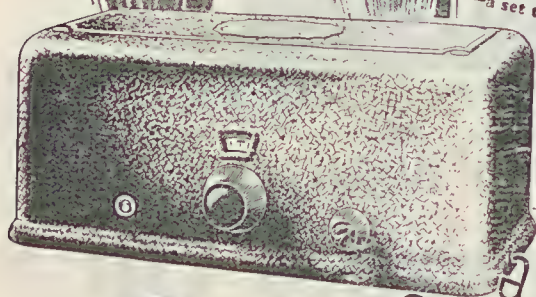
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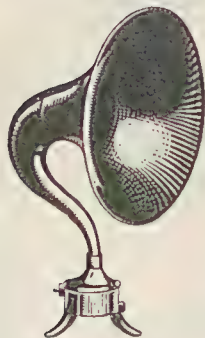


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BIT O' 'BACCA (Vol. 3)

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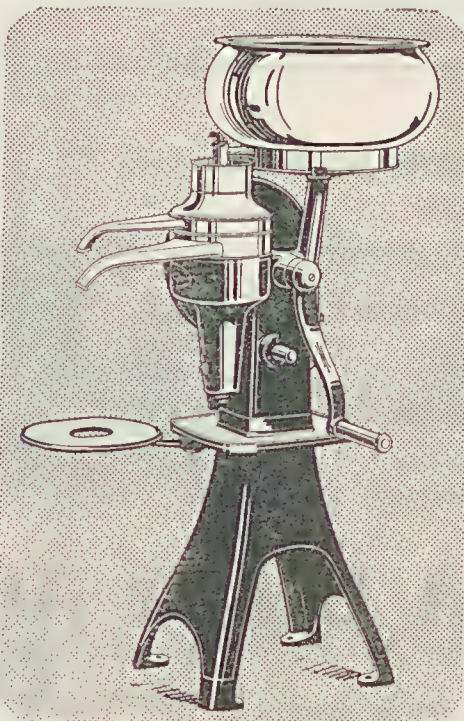
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THE JOURNAL
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Vol. XXVI.

June, 1928.

Part 6

BURNLEY EGG-LAYING COMPETITION, 1927-8.

(From April 1, 1927, to March 1st, 1928.)

*Report by W. C. Rugg, Chief Poultry Expert, and H. F. Clinton,
Assistant Poultry Expert.*

Two New Records Established.

In presenting the report on the seventeenth egg-laying competition at Burnley, it is gratifying to be able to state that two official records for twelve months' laying have been established. A splendid record was that made by a team of six Black Orpington pullets entered in the name of the Wingood Poultry Yard. These six birds laid a total of 1,604 eggs in the 48 weeks over which the competition extended, and finished 387 ahead of the second prize winners. Their record is undoubtedly the finest since the inception of the Burnley Competition seventeen years ago. In order to give the team a chance of beating the existing record of 1699 eggs laid in twelve months, the birds were retained at Burnley for the full 365 days, and during the twelve months they laid a total of 1723 eggs, an average of 287½ eggs per bird—certainly a wonderful performance. It was this Wingood team that secured first place in the last Winter Test. During the period of the test (122 days) they laid 643 eggs. The excellence of such a performance is made the more meritorious by the fact that last winter was probably the most severe experienced since the Burnley competitions were begun, an exceptional number of frosts being registered during the four months of the Winter Test.

Taking into consideration that these birds were running in open yards, and were exposed to all weathers, it is probable that the record made by them has not been excelled in any part of the world.

From time to time high totals are reported from various competitions, but these, in nearly all cases, are from birds in single pens completely protected from the weather. Further, all eggs laid by birds in the Burnley competitions are weighed, and those below a certain weight are not counted. This handicap is not imposed at many other competitions. The Wingood team's record, as far as the weight of eggs is concerned, is an excellent one. Three of the birds did not lay any second-grade eggs during the whole competition, and of the total of 1,723 only 110 were classed as second grade.

Mr. Goodwin, the proprietor of the Wingood Poultry Yards, is to be congratulated on the splendid result obtained, and as long as Victoria

has such excellent breeders distributing stock throughout the State an improvement in the poultry industry must take place.

Another gratifying feature of the 1927-28 competition was the fine score made by a Light Sussex hen, entered by Mr. W. Cocking. Not only did this bird secure first place in her section (her total for the 48 weeks of the competition was 258), but being retained at Burnley for the full 365 days, she established an official record for the breed with a total of 283 eggs for twelve months. It is interesting to note that during the competition this bird laid 121 eggs in 121 days. The Light Sussex breed has for many years been in keen demand on the London market at high prices. In quality, texture and appearance the flesh is probably second to that of no other breed. The recent laying record by Mr. Cocking's bird should convince breeders of utility poultry of the value of the Light Sussex for laying purposes. If some of our poultrymen who have been so successful in raising Black Orpingtons that have become splendid layers were to give the same care to breeding the Light Sussex, I am sure they would find them very profitable.



Winners in Section A, Class 3.

(Laid 1604 eggs during period of competition and 1723 eggs in 12 months.)
Owner, Wingood Poultry Yard.

Uniform Standard of Allotting Prizes Desirable.

For some time it has been thought desirable that all official competitions should be governed by uniform regulations.

If winning places are to be awarded on the value of eggs laid, it is extremely difficult to find a basis that would be equitable throughout the Commonwealth, owing to the variation of times of maximum and minimum production, and to the fact that usually there is considerable difference in the prices ruling in the several States. It would appear, therefore, that the only way in which the results from birds in competitions in the different parts of Australia can be compared would be by making the total number of first-grade eggs laid the deciding factor. The 2-oz. egg is generally accepted as the standard egg both here and in Great Britain, and it is possible that in the near future the winning places in our Burnley competitions will be decided

on the number of first-grade eggs laid by individual birds or teams competing in the different sections—a first-grade egg to weigh not less than $1\frac{3}{4}$ oz. during the first two months of the competition, *i.e.*, April and May; after that the standard to be 2 oz.; any eggs below the standard weight at any period of the competition to be recorded, but not taken into consideration in allotting prizes.

If the other States agree to adopt this system and also agree to weigh every egg laid by each bird, it will be possible to establish an Australian standard.

As far as we know, at only two egg-laying competitions in the Commonwealth are all eggs laid weighed individually—at the competitions conducted at Muresk, Western Australia, and at our own com-



No. 2 Bird in the Winning Team in Section A, Class 3.

(Laid 273 first grade eggs during the competition.) Owner, Wingood Poultry Yard.

petitions at Burnley—though all the leading competitions in Great Britain, Northern Ireland, and South Africa are judged on this system. It is admitted by most of the leading authorities that it is the only way in which the real breeding value of birds can be ascertained. Indeed, it is contended by some that the allotting of prizes on the number of eggs laid, irrespective of their weight, may be doing more harm than good to the industry.

Remarkable scores have been obtained in some egg-laying competitions in other countries. The most remarkable case was that where a total of 350 eggs was laid by a bird in twelve months. An offer of £200 for her was refused, and it is reported that stud sales of cockerels

bred from her have run into hundreds of pounds. Yet an English authority, after seeing this remarkable bird, and inspecting eggs laid by her, said that her death would be a good thing for the poultry industry, as the majority of eggs she produced were undersized.

Competition managers should realize that such birds are a menace to profitable poultry-keeping, and as long as they award prizes to them, so much longer will unprincipled breeders distribute stock bred from them.

It is gratifying to know that the best breeders have given their approval to the system of weighing eggs. The innovation has in no way decreased the popularity of the competition, and the number of



Mr. W. Cocking's Light Sussex, winner in Section B, Class 5.

(Laid 199 first grade and 59 second grade eggs during the competition.)

pens available was insufficient to meet applications for places in the 1928-29 competition.

The 1927-28 Competition.

The competitors in the 1927-28 competition showed a general improvement in size and stamina over those of the previous year, very few poor quality birds being sent in.

In Section A, Class 1, the winning team was owned by the Rosette Poultry Farm. It was a team of uniform quality. The highest number of eggs produced by any individual of the team was 250, and the lowest 201. The total number of eggs laid was 1,384, and of these only 32 were of second grade. Mr. A. J. Hill's team laid a greater number of eggs, but he was unfortunate in having included in the

team birds that laid too many second-grade eggs. Of the other teams in this section, that entered by Mr. W. Callow laid 1,296, of which only six were second grade, while that of Mr. Norman Meyers laid a total of 1,209, only seven of which were second grade.



Winners in Section A, Class 1, White Leghorns, Wet Mash.
Owner, Rosette Poultry Farm.
(Laid a total of 1352 first grade eggs.)

It is pleasing to record that an old competitor—Mr. A. Enticknap—secured first place in Class 2. In this class the competition between the leading teams was keen, and it was only in the last month that Mr. Enticknap's team moved into first place. His team laid 1,264 eggs, only 27 of which were second grade. The second prize winners laid

78 eggs more, but a high percentage of them were of second grade. The team entered by Mr. V. L. Forbes in this section comprised six birds of excellent appearance, but, unfortunately, one of them died a few weeks after the beginning of the competition.

In Class 3 the Wingood Poultry Yard birds laid 1,604 eggs, 387 more than the next team. With the Wingood team out of the way it would have been a very interesting competition, as a difference of only 25 separated the next four teams. The birds taking second place (Mr. Roberts') scored 1,217, only 13 of which were second grade. The third prize-winners were owned by Mrs. Mason; they laid 1,192, and of these only six were second grade.



Mr. A. Enticknap's Winning Team in Section A, Class 2, White Leghorns, Dry Mash.
(Laid 1237 first grade eggs during the competition.)

The Free-Choice system was given a trial, with the object of demonstrating to poultrymen that birds would, when given the choice of various foods, balance their own ration, and lay profitable numbers of eggs. The results obtained from the "free-choice" birds compare very favorably with those from the Black Orpington wet-mash section. If we omit the score made by the record team, and then compare the totals of each of the next three teams with the totals of the first three teams in the free-choice section, we find that there is a difference of only 72 eggs in favour of wet mash—certainly not a great advantage when the extra labour of mixing the mash every day is taken into consideration. This, also, has to be remembered when discussing the result given above, that it is known that competitors who entered birds in more than one section allotted their second selection to the "free-choice" section.

The winning team in Class 4, Free-Choice, Black Orpingtons, was that entered by T. L. Eastaugh; their total was 1,328. Mr. Cullen's team was second with 1,147.

In Class 5, Free-choice, White Leghorns, Mr. N. Burston secured



Winners in Section A, Class 4, Black Orpingtons, Free Choice.
Owner, Mr. T. L. Eastaugh.

first place with a very even team that laid 1,224 eggs. Mr. O'Mullane's team was second, with a score of 1,121.

To the birds fed under the Free-Choice system, the following foods were available at all times, in separate hoppers:—Wheaten pollard, bran, oat pollard, barley pollard, dried milk powder, wheat, Algerian

eats, maize and barley. The total weight of these foods consumed was 13,095 lb. 7 oz., the quantity of grain being 11,266 lb. 14 oz., and of meals 1,828 lb. 9 oz. The different meals were consumed in the following percentages:—Bran, 28 per cent.; wheat pollard, 25 per cent.; oat pollard, 11 per cent.; barley pollard, 8 per cent.; dried milk, 2 per cent. The percentages of the grain consumed were:—Wheat, 59 per cent.; Algerian oats, 17 per cent.; maize, 16 per cent.; and barley, 8 per cent.

In Class 7 there were only three entries, all Rhode Island Reds. The winning team, which laid 1,100 eggs, was owned by Mr. Dibbs.



Winning Bird in Section B, Class 2, White Leghorns, Dry Mash.

(Laid 268 first grade eggs.)

Owner, Mr. G. McDonnell.

In Section B, Class 1, White Leghorns, individual birds, the first prize was won by Mr. T. A. Mentiplay's entry. Her total was 284, only three of them of second grade.

In Class 2 the veteran breeder, Mr. G. McDonnell, carried off first prize with a bird that laid 272 eggs. She was closely pressed by a bird entered by Mr. W. G. Wiseman that laid a similar number of eggs, but a slightly better price was obtained for the eggs laid by Mr. McDonnell's bird, the value of those laid by her during the full period of the competition being 2d more than was obtained for those laid

by Mr. Wiseman's. In this class Mr. Mentiplay secured third place. The bird entered by him laid 269 eggs, all of first grade, and their value was only 6d. less than the amount obtained for the eggs of the bird placed second.

In Class 3 Mr. F. W. Gough won with a nice-looking Brown Leghorn, which laid 200 eggs.



Mr. N. Burston's Winning Team in Section A, Class 5. White Leghorns, Free Choice.
(Laid 1172 first grade and 52 second grade eggs.)

In Class 4, Black Orpingtons, Wet Mash, Mr. T. L. Eastaugh's bird was first with the good score of 291, though unfortunately there were a number of second-grade eggs. Mr. H. G. Taylor's bird was second

with 255 eggs, and Mr. C. E. Graham's was third with 253. Neither of the two latter birds laid any second-grade eggs. It was most regrettable that Mr. J. Taylor's Black Orpington pullet No. 206 died on 16th January. Up to that date she had laid 240 eggs, only 4 of which were second grade. She was then leading in her class, and in all probability would have continued to hold first place. The cause of death was her inability to pass a very large egg. After her death it was found that the egg was not only large (its weight was 3.6 ozs.), but also very irregular in shape. This was the only abnormal egg she produced during the competition.

In Class 5 Mr. Cocking's Light Sussex hen was successful with a score of 258 eggs.



Winner in Section B, Class 4, Black Orpingtons, Wet Mash.
(Laid 199 first grade and 92 second grade eggs.) Owner, Mr. T. L. Eastaugh.

FINANCIAL SIDE.

The number of birds in the competition at its beginning was 552, but 23 of them died. The total number of days these latter birds collectively were in the pens was 4,956, which is equal, approximately, to 15 birds having been there for the 48 weeks. Therefore, the total number of birds in the competition for the whole period may be regarded as 544, and this is the figure that has been used when working out averages, etc.

The total number of eggs laid during the competition was 107,638—an average of 197.86 eggs per bird.

The price realized for eggs averaged 1s. 8½d. per dozen. The return from sales averaged £1 6s. 10¾d. per bird, and the cost of food averaged 10s. 9½d. per bird—a fraction under 2¾d. per week; thus the profit over cost of food for the 48 weeks averaged 16s. 1¼d. per bird.

A list of the different kinds and quantities of the food fed to the birds during the currency of the competition is given hereunder:—Wheat, 22,664 lb.; oats, 3,370 lb.; maize, 4,299 lb.; barley, 866 lb.; bran, 9,818 lb.; wheat pollard, 12,036 lb.; oaten pollard, 266 lb.; barley pollard, 179 lb.; meat, 3,264 lb.; meatmeal, 83 lb.; dried milk, 694 lb.; onions, 564 lb.; grit, 1½ tons; charcoal, 8 bags.



Mr. H. Dibbs' Team of Rhode Island Reds, Winners in Section A, Class 7.

(Total first grade eggs, 1087, and second grade, 13.)

Shade for Poultry.

Wherever possible, it is advisable to provide natural shelter in poultry yards by either growing hedges or shelter trees.

Every summer great losses are sustained by poultrymen owing to hens dying from heat apoplexy. In some summers thousands of birds are lost. During a heat spell two years ago losses of from 40 to 100 birds were common; at one farm 300 died on "Black Sunday." Sometimes even in the spring, birds are affected by the warm weather. Unfortunately, it is usually the good layers that suffer most, largely because such birds must consume large quantities of food, and the heavy eater always feels the warm weather.

On many farms much has been done for the comfort of birds by providing better ventilation in houses, but more could be done by planting suitable trees. There is no doubt in my mind that the beautiful shelter trees growing in the competition pens at Burnley are a wonderful benefit to the birds competing in the Teams' tests, and are partly responsible for the excellent scores made by the birds. These

shrubs were planted shortly after the pens were built, 17 years ago. They are carefully cut back each autumn, as shown in the illustration:



The plant Madagascariac Buddleia cut hard back in the autumn.



The same plant as illustrated above in the following summer.

above. This allows the sun to sweeten the ground and helps to keep it dry during winter. After the first rain, new shoots

appear, and by the time the warm weather arrives, these have grown, providing beautiful shelter, as shown in the second illustration on page 332.

The shrub illustrated is Madagascar Buddleia (*Buddleia Madagascariensis*). These shrubs grow remarkably well at Burnley, though they do not seem to be suited to the soil conditions obtaining at the State Research Farm at Werribee; there the most suitable shade trees seem to be Boobyalla, Sallow Acacia (*Acacia longifolia*) and the Cootamundra wattle.

I would strongly urge poultry-farmers to plant now any trees suited to their districts. These will not only improve the appearance of the



Mr. F. W. Gough's Brown Leghorn.
Winner in Section B, Class 3, Light Breeds, Wet Mash.

poultry-yard, but will enable the birds to thrive much better than they would without shade. Thus the trouble and small expense of planting will be quickly repaid.

Conclusion.

Mr. Macauley is to be congratulated on the fine performances of the birds at the competitions, for these were, in a large measure, due to his management and feeding. On receiving their birds back at the conclusion of the competitions many owners wrote to express their appreciation at the excellent condition of their birds.

We must once more place on record our gratitude to Mr. H. Baker, who has been responsible for calculations of the value of eggs laid during the competition, and also to Mr. W. Pederick, for help in preparing some of the tables.

DETAILS OF FINAL RESULTS.

For the purpose of valuation, eggs were divided into first grade valued at market price, and second grade valued at market price less 25 per cent. During the first two months of the competition, a first grade egg must have weighed not less than $1\frac{3}{4}$ oz., and thereafter not less than 2 oz.; during this period the minimum weight of a second grade egg was $\frac{1}{4}$ oz. less. No value was given for underweight eggs.

(x) Denotes eggs laid outside of nest. (d) Denotes death of bird.

As some competitors may not have kept a note of the colour of the identification rings the various colours are repeated here:—No. 1, a red ring; No. 2, white; No. 3, blue; No. 4, yellow; No. 5, dark-green; and No. 6, light-green.

Section A.—Groups of Six Birds—Trapnested.

Class 1.—White Leghorns, Wet Mash.

Pen No	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
							£ s. d.
6	1st Prize, Champion Certificate— "Rosette" Poultry Farm (C. J. Ratz), Burwood and Dobson roads, Lower Fern- tree Gully	1	234	229	5	..	1 15 8·52
		2	238	233	5	1	1 16 0·55
		3	201	196	5	..	1 10 4·07
		4	250	244	6	1	1 18 3·20
		5	240	239	1	..	1 16 6·08
		6	219	209	10	..	1 12 0·40
		x	2	2	..	..	0 0 3·33
		..	1,384	1,352	32	2	10 9 2·15
4	2nd Prize, Government Certificate— A. J. Hill, "Sunraysia" Poultry Farm, Greens- borough	1	236	215	21	1	1 14 8·76
		2	217	198	19	..	1 11 5·45
		3	245	242	3	..	1 17 5·77
		4	254	208	46	..	1 16 4·81
		5	207	178	29	1	1 9 9·50
		6	240	206	34	..	1 14 11·22
		x	3	3	..	..	0 0 5·25
		..	1,402	1,250	152	2	10 5 2·76
10	3rd Prize, Government Certificate— F. Wight, Canterbury-road, Bayswater	1	206	190	16	..	1 10 8·12
		2	228	166	62	..	1 12 3·11
		3	227	204	23	1	1 13 10·24
		4	230	203	27	1	1 13 9·75
		5	227	204	23	..	1 13 9·36
		6	219	195	24	..	1 12 7·91
		x	2	2	..	..	0 0 3·33
		..	1,339	1,164	175	2	9 17 3·82
2	W. Cullen, Werribee	1	215	215	..	..	1 13 0·14
		2	215	215	..	..	1 13 0·80
		3	231	229	2	..	1 15 1·81
		4	232	231	1	..	1 14 11·71
		5	202	200	2	..	1 9 8·64
		6	198	197	1	..	1 10 9·45
		x	3	3	..	..	0 0 5·25
		..	1,296	1,290	6	..	9 17 1·80

Section A—continued.

Class 1.—White Leghorns, Wet Mash—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
7	H. Schmutter, Iona, via Bunyip	1	174	169	5	..	£ s. d. 1 3 2.41
		2	236	231	5	..	1 16 0.26
		3	220	215	5	1	1 13 0.20
		4	210	207	3	..	1 11 0.11
		5	216	213	3	..	1 11 11.38
		6	252	151	101	..	1 14 6.82
		x	4	4	..	..	0 0 6.66
		..	1,312	1,190	122	1	9 10 3.84
1	W. H. Bamford, 74 Adelaide-road, Glenelg, South Australia	1	235	224	11	..	1 14 4.77
		2	226	186	40	..	1 12 7.84
		3	251	242	9	3	1 18 2.74
		4	253	179	74	2	1 14 5.01
		5	160	89	71	1	0 19 6.22
		6	208	118	90	..	1 6 8.83
		x	..	..	..	..	..
		..	1,333	1,038	295	6	9 5 11.41
9	J. J. West, 4 Gadd-street, Croxton	1	204	181	23	..	1 9 9.36
		2	181	138	43	15	1 7 2.18
		3	212	198	14	1	1 11 4.28
		4	238	226	12	..	1 16 0.79
		5	201	158	42	..	1 7 11.47
		6	188	165	23	2	1 8 8.96
		x	4	4	..	2	0 0 7.00
		..	1,228	1,070	158	20	9 1 8.04
3	C. C. Dunn, "Spero" Stud Poultry Farm, Moorabbin-road, Cheltenham	1	245	185	60	2	1 13 10.22
		2	223	189	34	..	1 12 4.16
		(d) 3	69	58	11	..	0 13 8.54
		4	274	257	17	1	2 0 3.57
		5	249	215	34	..	1 15 7.84
		6	179	163	16	..	1 4 3.98
		x	1	1	..	..	0 0 1.75
		..	1,240	1,068	172	3	9 0 4.06
5	G. Pocknall, 112 Dundas-street, Thornbury	1	237	141	96	3	1 12 6.24
		2	234	199	35	3	1 14 3.75
		3	221	97	124	13	1 8 8.41
		4	205	174	31	4	1 10 7.51
		5	216	105	111	11	1 9 3.90
		6	175	94	81	2	1 2 8.68
		x	3	2	1	..	0 0 4.81
		..	1,291	812	479	36	8 18 7.30

Section A—continued.

Class 1.—White Leghorns, Wet Mash—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
12	Norman Meyers, 48 Queens-avenue, Caulfield	1	204	204	..	2	£ s. d. 1 10 11·26
		2	159	159	..	..	1 2 3·96
		3	192	191	1	..	1 8 1·61
		4	231	228	3	1	1 14 10·46
		5	202	202	..	..	1 9 0·36
		6	219	216	3	..	1 12 10·96
		x	2	2	..	1	0 0 3·50
		..	1,209	1,202	7	4	8 18 6·11
11	W. E. C. O'Neill, "Bonnie View," Brassey - avenue, Rosanna	1	220	196	24	1	1 12 4·57
		2	163	116	47	1	0 19 10·52
		3	203	170	33	1	1 8 5·94
		4	222	214	8	..	1 11 7·72
		5	197	170	27	..	1 7 0·18
		6	168	109	59	..	1 1 7·72
		x	1	1	..	..	0 0 1·75
		..	1,174	976	198	3	8 1 2·49

Class 2.—White Leghorns, Dry Mash.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
16	1st Prize, Champion Certificate— A. Enticknap, 38 Serell-street, East Malvern	1	212	207	5	2	£ s. d. 1 10 1·63
		2	207	200	7	1	1 10 7·41
		3	213	208	5	4	1 12 4·02
		4	243	238	5	1	1 16 7·33
		5	185	185	..	1	1 6 9·75
		6	200	195	5	..	1 9 1·35
		x	4	4	..	..	0 0 7·00
		..	1,264	1,237	27	9	9 6 2·49
21	2nd Prize, Government Certificate— S. Rainer, Birdwood-avenue, Balwyn	1	225	135	90	..	1 9 6·45
		2	235	149	86	1	1 11 9·55
		3	207	182	25	..	1 9 5·94
		4	246	177	69	..	1 14 8·04
		5	201	137	64	1	1 6 7·45
		6	225	192	33	..	1 12 9·69
		x	3	3	..	..	0 0 5·25
		..	1,342	975	367	2	9 5 4·37
18	3rd Prize, Government Certificate— A. J. Hill, "Sunraysia" Poultry Farm, Greens-borough	1	253	233	20	..	1 17 7·07
		2	229	218	11	1	1 14 1·44
		3	183	127	56	2	1 3 3·20
		4	214	190	24	..	1 9 6·45
		5	203	189	14	..	1 9 2·61
		6	201	162	39	1	1 6 6·27
		x	5	2	3	..	0 0 7·01
		..	1,288	1,121	167	4	9 0 10·05

Section A—continued.

Class 2.—White Leghorns, Dry Mash—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
19	Geo. Hayman, "Bonnie View," Murray-road, Preston	1	242	217	25	..	£ s. d. 1 16 0·93
		2	229	198	31	1	1 12 6·48
		3	181	167	14	1	1 7 8·76
		4	187	165	22	..	1 5 7·31
		5	168	134	34	..	1 2 11·82
		6	157	131	26	..	1 1 7·36
		x	..	..	..	..	..
		..	1,164	1,012	152	2	8 6 6·66
29	C. M. New, "Rondaville," Marriott-street, Caulfield	1	220	213	7	..	1 13 5·91
		(d) 2	137	132	5	..	0 17 8·57
		3	182	173	9	..	1 4 4·39
		4	159	156	3	..	1 1 6·92
		5	247	235	12	..	1 16 9·19
		6	164	138	26	..	1 1 2·64
		x	5	3	2	..	0 0 7·88
		..	1,114	1,050	64	..	7 15 9·50
17	V. L. Forbes, Eden Park, Whittlesea	1	225	221	4	..	1 13 0·21
		2	156	152	4	..	1 2 1·48
		3	292	199	3	..	1 9 11·25
		(d) 4	26	24	2	..	0 4 7·62
		5	217	203	14	..	1 12 2·57
		6	168	144	24	..	1 5 7·96
		x	9	9	..	..	0 1 3·42
		..	1,003	952	51	..	7 8 10·51
23	R. P. Bartlett, "Wandong," 5 Freeman-street, Caulfield	1	201	194	7	..	1 10 5·74
		2	158	140	18	2	1 1 8·10
		3	151	141	10	1	0 19 5·01
		4	190	184	6	1	1 6 2·74
		5	152	151	1	1	0 19 6·95
		6	188	186	2	1	1 8 3·67
		x	2	2	..	..	0 0 4·17
		..	1,042	998	44	6	7 6 0·38
15	J. G. Alston, "Belle Vue" Egg Farm, 116 Dundas- street, Thornbury	1	171	129	42	..	1 1 8·20
		2	218	151	67	2	1 10 7·25
		3	192	176	16	..	1 8 9·63
		4	156	114	42	2	0 19 0·77
		5	105	82	23	..	0 14 4·69
		6	150	119	31	..	1 0 0·75
		x	2	2	..	..	0 0 3·92
		..	994	773	221	4	6 14 11·21

Section A—continued.

Class 2.—White Leghorns, Dry Mash—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
							£ s. d.
22	C. Smart, "Glenpark," Wheatly-road, Bentleigh	1	127	125	2	..	0 17 9.28
		2	175	164	11	1	1 5 3.56
		3	172	172	..	..	1 5 2.58
		4	167	167	..	..	1 4 6.16
		(d) 5	135	135	..	..	0 19 11.72
		6	159	152	7	..	1 0 8.98
		x	6	6	..	..	0 0 10.50
		..	941	921	20	1	6 14 4.78

Class 3.—Black Orpingtons, Wet Mash.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
							£ s. d.
35	1st Prize, Champion Certificate— "Wingood" Poultry Yard (T. A. Goodwin), 8 Peel-street, Kew	1	260	250	10	..	2 0 6.21
		2	273	273	..	..	2 3 0.56
		3	270	270	..	..	2 2 2.98
		4	290	267	23	..	2 4 5.72
		5	258	181	77	..	1 16 7.64
		6	253	253	..	..	1 18 5.05
		x	..	..	..	..	..
		..	1,604	1,494	110	..	12 5 4.16
33	2nd Prize, Government Certificate— A. W. H. Roberts, 12 Price-street, Regent	1	245	245	..	..	1 17 6.49
		2	205	204	1	1	1 10 4.13
		3	195	195	..	..	1 10 5.79
		4	154	149	5	..	1 2 11.38
		5	223	223	..	..	1 14 1.81
		6	192	185	7	1	1 10 0.88
		x	3	3	..	..	0 0 5.25
		..	1,217	1,204	13	2	9 5 11.73
32	Mrs. D. Mason, Waterloo-street, Ringwood	1	243	242	1	..	1 17 2.25
		2	155	153	2	..	1 3 0.03
		3	219	217	2	2	1 14 3.62
		4	211	210	1	..	1 11 11.74
		5	164	164	..	..	1 6 4.76
		6	198	198	..	..	1 10 10.89
		x	2	2	..	..	0 0 3.75
		..	1,192	1,186	6	2	9 4 1.04
34	G. J. White, "Allwell" Poultry Farm, Watson's-road, Glen Waverley	1	205	205	..	..	1 11 6.36
		2	172	170	2	..	1 6 1.64
		3	206	205	1	..	1 12 4.04
		4	189	188	1	..	1 9 6.12
		5	196	196	..	..	1 9 10.90
		6	228	193	35	1	1 11 10.52
		x	3	2	1	..	0 0 4.45
		..	1,199	1,159	40	1	9 1 8.03

Section A—continued.

Class 3.—Black Orpingtons, Wet Mash—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
30	C. C. Dunn, "Spero" Stud Poultry Farm, Moorabbin-road, Cheltenham	1	225	70	155	5	1 8 1·47
		2	170	165	5	..	1 5 7·72
		3	156	143	13	..	1 3 3·84
		4	224	216	8	..	1 13 9·97
		5	225	219	6	..	1 14 0·43
		6	205	199	6	1	1 10 5·14
		x	4	4	..	..	0 0 7·83
		..	1,209	1,016	193	6	8 16 0·40
27	A. Brundrett, 43 Parslow-street, Malvern	1	139	135	4	..	1 1 11·82
		2	180	173	7	..	1 7 8·49
		3	192	191	1	..	1 10 5·32
		4	244	244	..	..	1 17 0·21
		5	191	189	2	1	1 10 2·27
		6	177	174	3	1	1 6 11·85
		x	4	4	..	..	0 0 6·66
		..	1,127	1,110	17	2	8 14 10·42
29	W. Cullen, Werribee ..	1	248	248	..	..	1 18 11·15
		2	206	203	3	..	1 8 11·52
		3	170	166	4	..	1 6 7·15
		(d) 4	83	83	..	..	0 14 4·13
		5	173	167	6	..	1 5 1·56
		6	198	197	1	..	1 11 1·60
		x	..	..	..	..	..
		..	1,078	1,064	14	..	8 5 1·11
28	"Blue Ribbon" Poultry Farm (L. W. Parker), Barongarook, via Colac	1	205	203	2	..	1 11 0·88
		2	260	258	2	..	2 0 3·06
		3	94	69	25	17	0 12 9·16
		4	172	168	4	..	1 5 3·03
		5	197	169	28	5	1 8 7·18
		6	180	179	1	1	1 4 8·94
		x	7	7	..	..	0 1 0·08
		..	1,115	1,053	62	23	8 3 8·33
31	H. J. Hulme, Bobinawarrah, via Wangaratta	1	199	199	..	..	1 11 11·73
		2	200	200	..	..	1 11 6·96
		3	159	158	1	..	1 5 11·88
		4	148	148	..	..	1 4 10·03
		5	189	189	..	..	1 10 0·97
		6	112	111	1	..	0 17 4·02
		x	4	4	..	..	0 0 6·66
		..	1,011	1,009	2	..	8 2 4·25

Section A—continued.

Class 4.—Black Orpingtons, Free Choice.

No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
							£ s. d.
42	1st Prize, Champion Certificate— T. L. Eastaugh, Point Nepean-road, Highett	1	251	247	4	..	1 18 10·58
		2	187	74	113	3	1 3 1·22
		3	232	165	67	2	1 13 3·71
		4	247	96	151	6	1 11 6·28
		5	219	212	7	1	1 12 0·88
		6	192	177	15	1	1 6 2·26
		x	..	..	..	1	..
		..	1,328	971	357	14	9 5 0·93
40	W. Cullen, Werribee	1	212	204	8	..	1 10 6·37
		2	144	120	24	2	0 18 11·88
		3	193	174	19	..	1 7 10·38
		4	217	207	10	2	1 11 6·75
		5	194	170	24	..	1 8 0·62
		6	184	174	10	..	1 5 7·04
		x	3	2	1	..	0 0 5·23
		..	1,147	1,051	96	4	8 3 0·27
45	F. M. G. Starbuck, Murrabit, via Kerang	1	158	149	9	3	1 3 10·49
		2	136	131	5	..	0 19 6·95
		3	187	181	6	..	1 9 0·80
		4	220	218	2	1	1 14 0·03
		5	201	191	10	1	1 10 3·43
		6	152	152	..	1	1 2 10·16
		x	7	5	2	..	0 0 11·61
		..	1,061	1,027	34	6	8 0 7·47
44	K. A. McLaughlin, "Dandevue" Poultry Farm, Central-avenue, Bayswater	1	134	81	53	5	0 19 9·84
		2	218	188	30	2	1 11 5·37
		3	143	89	54	6	1 1 0·92
		4	195	124	71	3	1 7 7·38
		5	171	151	20	5	1 5 4·39
		6	148	101	47	7	1 1 2·54
		x	3	1	2	..	0 0 4·20
		..	1,012	735	277	28	7 6 10·64
43	M. G. Leech, "Trevallyn" Poultry Farm, Sydney-road, Campbellfield	1	115	114	1	..	0 15 11·37
		2	125	117	8	..	0 19 9·37
		3	203	197	6	2	1 10 8·47
		4	131	115	16	1	0 18 1·64
		5	153	151	2	..	1 3 4·96
		6	180	117	63	5	1 3 7·43
		x	7	4	3	..	0 0 9·79
		..	914	815	99	8	6 12 5·03

Section A—continued.

Class 4.—Black Orpingtons, Free Choice—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
41	C. C. Dunn, "Spero" Stud Poultry Farm, Moorabbin-road, Cheltenham	1	164	89	75	4	£ s. d. 1 0 1-90
		2	120	108	12	4	0 16 4-79
		3	203	103	100	7	1 6 2-60
		4	180	128	52	..	1 3 6-96
		5	181	156	25	4	1 5 5-03
		6	140	129	11	1	0 18 11-65
		x	8	8	..	..	0 1 2-83
		..	996	721	275	20	6 11 10-95
39	G. J. White, "Allwell" Poultry Farm, Watson's-road, Glen Waverley	1	97	97	..	..	0 16 8-05
		2	105	105	..	..	0 15 11-09
		3	209	209	..	..	1 12 4-98
		4	123	123	..	..	1 0 11-16
		5	92	92	..	..	0 13 1-59
		6	138	137	1	..	1 0 9-22
		x	13	13	..	..	0 1 9-41
		..	777	776	1	..	6 1 7-50
46	"Shawville" (H. Shaw), 15 Mayfield-street, Ripponlea	1	140	20	120	50	0 16 4-09
		2	132	10	122	68	0 17 10-81
		3	148	48	100	42	0 18 11-14
		4	145	134	11	9	1 1 7-02
		5	76	15	61	17	0 10 0-82
		6	154	15	139	43	0 19 0-84
		x	2	1	1	5	0 0 3-06
		..	797	243	554	234	5 4 1-78

Class 5.—White Leghorns, Free Choice.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
48	1st Prize, Champion Certificate— N. Burston, Bulleen-road, Camberwell	1	187	184	3	..	£ s. d. 1 5 8-39
		2	231	221	10	1	1 15 3-47
		3	211	197	14	..	1 10 6-95
		4	213	210	3	..	1 12 2-58
		5	165	151	14	48	1 4 11-27
		6	212	209	3	..	1 10 11-14
		x	5	..	5	..	0 0 7-89
		..	1,224	1,172	52	49	9 0 3-69

Section A—continued.

Class 5.—White Leghorns, Free Choice—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
57	E. and D. O'Mullane, 24 Medley-street, South Yarra	1	163	154	9	..	£ s. d. 1 2 1·03
		2	201	195	6	..	1 9 10·45
		3	195	193	2	..	1 7 7·21
		4	192	185	7	..	1 7 6·07
		5	187	176	11	..	1 6 7·32
		6	180	173	7	..	1 4 10·28
		x	3	3	..	..	0 0 5·91
		..	1,121	1,079	42	..	7 19 0·27
51	W. Cullen, Werribee	1	188	177	11	..	1 6 7·23
		2	186	171	15	..	1 5 11·13
		3	241	232	9	2	1 15 11·81
		4	159	134	25	2	1 0 3·51
		5	170	156	14	1	1 1 10·47
		6	187	168	19	..	1 5 11·54
		x	6	4	2	..	0 0 11·17
		..	1,137	1,042	95	5	7 17 6·86
55	T. A. Mentiplay, Somerville ..	1	197	195	2	..	1 9. 2·14
		2	171	156	15	1	1 4 0·64
		3	179	172	7	..	1 5 9·96
		4	193	192	1	1	1 8 10·13
		5	209	208	1	..	1 11 6·61
		6	137	131	6	..	0 17 0·07
		x	5	5	..	..	0 0 8·58
		..	1,091	1,059	32	2	7 17 2·13
52	Don Granter, 163 Martin street, Gardenvale	1	142	129	13	2	0 19 8·00
		2	192	189	3	1	1 7 7·13
		3	203	201	2	..	1 9 7·56
		4	175	170	5	..	1 5 3·08
		5	146	136	10	..	1 0 8·30
		6	155	148	7	..	1 3 0·11
		x	5	4	1	..	0 0 8·31
		..	1,018	977	41	3	7 6 6·49
49	A. E. Bailey, 19 Crimea-street, Caulfield	1	213	213	..	1	1 11 1·75
		(d) 2	50	43	7	..	0 8 3·56
		3	199	198	1	..	1 7 8·93
		4	180	175	5	..	1 4 5·26
		5	184	179	5	..	1 6 6·62
		6	192	175	17	..	1 7 7·86
		x	5	4	1	..	0 0 8·19
		..	1,023	987	36	1	7 6 6·17

Section A—continued.

Class 5.—White Leghorns, Free Choice—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
58	W. M. Percy, Stanley-street, Ivanhoe	1	187	153	34	..	£ s. d. 1 4 6'87
		2	192	167	25	..	1 7 4'74
		3	189	170	19	4	1 7 5'26
		4	164	153	11	..	1 1 3'89
		5	153	142	11	1	1 0 6'11
		6	156	138	18	..	1 0 5'89
		x	5	5	..	1	0 0 9'58
		..	1,046	928	118	6	7 2 6'34
53	"G.G." Stud (T. Goodisson), Lucan-street, Bendigo	1	165	142	23	..	1 1 7'45
		2	181	163	18	..	1 5 1'58
		3	162	152	10	..	1 0 9'09
		4	191	178	13	1	1 6 10'94
		5	155	133	22	..	0 19 4'73
		6	187	150	37	..	1 5 0'68
		x	10	5	5	..	0 1 3'05
		..	1,051	923	128	1	7 0 1'52
54	M. G. Leech, "Trevallyn" Poultry Farm, Sydney-road, Campbellfield	1	147	125	22	2	1 1 0'19
		2	138	126	12	1	1 0 6'51
		3	180	174	6	..	1 5 11'24
		4	207	194	13	1	1 10 10'05
		5	139	137	2	..	0 19 4'59
		6	119	112	7	1	0 17 7'96
		x	1	1	..	1	0 0 1'75
		..	931	869	62	6	6 15 6'29
60	"Shawville" (H. Shaw), 15 Mayfield-street, Ripponlea	1	180	167	13	1	1 5 6'37
		2	147	132	15	2	0 19 4'64
		3	145	117	28	1	0 19 0'23
		4	199	188	11	..	1 8 11'61
		5	145	107	38	1	0 18 11'14
		6	152	147	5	1	1 0 8'83
		x	4	3	1	2	0 0 7'36
		..	972	861	111	8	6 13 2'18
50	R. R. W. Brown, Werribee ..	1	166	112	54	4	1 2 11'32
		2	171	105	66	4	1 0 8'17
		3	175	126	49	8	1 3 6'80
		4	206	137	69	..	1 9 4'81
		5	116	89	27	4	0 14 3'13
		6	132	88	44	..	0 16 1'23
		x	2	1	1	3	0 0 2'94
		..	968	658	310	23	6 7 2'40

Section A—continued.

Class 5.—White Leghorns, Free Choice—continued.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
61	G. J. White, "Allwell" Poultry Farm, Watson's-road, Glen Waverley	1	127	126	1	..	£ s. d. 0 16 11'01
		2	180	177	3	..	1 5 8'33
		3	162	162	..	..	1 2 1'93
		4	167	163	4	..	1 3 1'34
		5	152	151	1	..	1 0 6'36
		6	125	125	..	..	0 17 0'54
		x	2	2	..	1	0 0 3'50
		..	915	906	9	1	6 5 9'01
59	H. W. Smith, "Wyndara" Stud Poultry Farm, Ethelgrove, Preston	1	141	130	11	..	0 19 2'26
		(d) 2	26	26	..	..	0 5 2'67
		3	123	116	7	..	0 15 3'33
		4	146	140	6	..	1 3 4'69
		5	144	136	8	..	0 19 0'12
		6	92	92	..	..	0 11 9'73
		x	8	7	1	..	0 1 4'10
		..	680	647	33	..	4 15 2'90
56	J. B. Nicoll, Lake-street, Reservoir	1	168	111	57	21	1 2 4'75
		2	94	22	72	43	0 10 4'12
		3	127	42	85	40	0 15 0'82
		4	107	39	68	40	0 12 5'10
		5	109	19	90	85	0 13 2'88
		6	56	8	48	86	0 5 9'42
		x	1	1	..	1	0 0 2'50
		..	662	242	420	316	3 19 5'59

Class 6.—All Light Breeds, other than White Leghorns, Wet Mash (Anconas).

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
62	1st Prize, Champion Certificate— Farrin Webb, "Rafa," Traralgon	1	156	153	3	1	£ s. d. 1 1 2'27
		2	110	106	4	1	0 14 8'78
		3	218	212	6	..	1 11 1'87
		4	163	158	5	1	1 2 2'08
		5	204	203	1	..	1 9 7'53
		6	157	156	1	..	1 1 6'68
		x	4	2	2	1	0 0 6'81
		..	1,012	990	22	4	7 1 0'02

Section A—continued.

Class 7.—All Heavy Breeds, other than Black Orpingtons, Wet Mash
(Rhode Island Reds).

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
							£ s. d.
65	1st Prize, Champion Certificate— H. Dibbs, 3 Balfe-crescent, West Brunswick	1	211	209	2	..	1 11 0·94
		2	134	134	..	..	1 0 3·62
		3	202	196	6	..	1 10 9·92
		4	209	208	1	..	1 12 8·61
		5	193	191	2	..	1 9 9·31
		6	146	144	2	..	1 2 3·57
		x	5	5	..	..	0 0 7·66
		..	1,100	1,087	13	..	8 7 7·63
66	2nd Prize, Government Certificate— "Shawville" (H. Shaw), 15 Mayfield-street, Ripponlea	1	136	135	1	..	0 17 1·16
		2	167	164	3	..	1 6 4·61
		3	171	168	3	..	1 3 11·38
		4	202	202	..	..	1 11 8·69
		5	146	143	3	..	0 19 8·22
		6	200	186	14	2	1 7 1·93
		x	14	14	..	2	0 2 2·91
		..	1,036	1,012	24	4	7 8 2·90
67	Farrin Webb, "Rafa," Traralgon	1	138	138	..	..	0 18 7·67
		2	170	167	3	..	1 4 0·42
		3	107	107	..	..	0 17 4·50
		4	187	187	..	..	1 6 2·03
		5	137	137	..	..	1 0 8·44
		6	155	154	1	..	1 1 8·62
		x	4	4	..	..	0 0 7·00
		..	898	894	4	..	6 9 2·68



Section B—Individual Birds—Single Test.

Pen No.	Name.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
						£ s. d.

Class 1.—White Leghorns, Wet Mash.

36	1st Prize, Champion Certificate— T. A. Mentiplay, Somerville	284	281	3	..	2 3 4
12	2nd Prize, Government Certificate— T. L. Eastaugh, Point Nepean-road, Highett ..	273	248	25	..	2 0 9
32	3rd Prize, Government Certificate— M. G. Leech, "Trevallyn" Poultry Farm, Sydney-road, Campbellfield ..	259	251	8	..	1 18 11

OTHER COMPETITORS.

24	O. H. Gepp	254	254	..	..	1 18 9
46	H. R. McChesney	253	248	5	..	1 18 3
15	W. J. Flack	257	249	8	2	1 18 3
61	T. J. Stevens	253	252	1	..	1 17 10
43	G. McDonnell	253	250	3	..	1 17 10
42	Norman Meyers	249	212	37	1	1 17 4
5	W. Cook	253	222	31	..	1 17 2
71	G. D. Witham	242	241	1	..	1 17 2
13	C. R. Fagg	268	168	100	..	1 16 11
77	J. J. West	244	223	21	..	1 16 11
63	"Shawville"	240	234	6	..	1 16 10
44	G. McDonnell	246	233	13	..	1 16 10
48	"Navara" Poultry Farm ..	244	227	17	..	1 16 9
23	O. H. Gepp	239	239	..	..	1 16 8
41	Norman Meyers	244	243	1	1	1 16 7
8	H. R. Cropley	251	231	20	..	1 16 7
57	A. V. Ricketts	240	226	14	1	1 16 7
1	J. Brighton and Son ..	237	237	..	..	1 16 6
67	Paul Thomson	249	244	5	..	1 16 0
49	Mrs. A. Oxley	232	229	3	..	1 16 0
4	A. Beer	237	229	8	..	1 15 6
62	T. J. Stevens	235	233	2	..	1 15 2
17	Mrs. Fretwell	232	230	2	..	1 15 2
11	T. L. Eastaugh	228	228	..	..	1 15 2
72	G. D. Witham	247	175	72	..	1 15 0
16	W. J. Flack	231	231	..	..	1 15 0
64	"Shawville"	239	234	5	..	1 14 11
78	J. J. West	237	206	31	..	1 14 11
45	H. R. McChesney	227	222	5	..	1 14 10
19	F. W. Gough	241	178	63	1	1 14 7
66	P. N. Tilley	250	154	96	1	1 14 6

Section B—continued.

Pen No.	Name.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
						£ s. d.
CLASS I.—WHITE LEGHORNS, WET MASH—continued.						
29	"Kadima" Poultry Farm ..	232	211	21	..	1 14 5
7	H. R. Cropley ..	226	226	..	..	1 14 3
33	Mrs. Jean Long ..	225	225	..	..	1 14 2
38	A. Martin ..	233	167	66	15	1 14 0
58	A. V. Ricketts ..	229	205	24	3	1 14 0
21	Don Granter ..	228	199	29	..	1 13 11
6	W. Cook ..	220	219	1	..	1 13 10
26	B. Harrison ..	227	220	7	..	1 13 8
54	G. E. Rees ..	227	204	23	1	1 13 8
75	E. and D. O'Mullane ..	212	210	2	..	1 13 1 (d)
9	R. R. Christie ..	217	217	..	1	1 13 0
27	F. Julian ..	235	219	16	..	1 12 11
25	B. Harrison ..	218	206	12	..	1 12 9
22	Don Granter ..	213	213	..	1	1 12 6
80	"Orana" Poultry Farm ..	227	221	6	..	1 12 5
28	F. Julian ..	221	220	1	..	1 12 4
39	Mrs. Molin ..	207	188	19	1	1 11 3
73	W. Woods ..	195	195	..	..	1 10 9
65	P. N. Tilley ..	199	175	24	1	1 10 8
68	Paul Thomson ..	237	120	117	4	1 10 8
37	A. Martin ..	206	204	2	..	1 10 3
47	"Navara" Poultry Farm ..	201	201	..	..	1 10 2
34	Mrs. Jean Long ..	200	200	..	..	1 10 1
52	Mrs. W. Pert ..	198	198	..	..	1 10 0
70	A. A. Veitch ..	195	194	1	..	1 9 6
69	A. A. Veitch ..	197	192	5	..	1 9 5
59	A. Siede and Sons ..	199	198	1	1	1 9 5
10	R. R. Christie ..	199	194	5	..	1 8 11
51	Mrs. W. Pert ..	199	121	78	26	1 8 6
40	Mrs. Molin ..	185	183	2	..	1 8 4
50	Mrs. A. Oxley ..	220	59	161	29	1 7 10
53	G. E. Rees ..	206	156	50	2	1 7 9
31	M. G. Leech ..	200	146	54	2	1 7 8
3	A. Beer ..	191	188	3	..	1 7 5
60	A. Siede and Sons ..	180	178	2	..	1 7 4
55	O. E. Reilly ..	205	205	..	..	1 7 3
2	J. Brighton and Son ..	190	189	1	..	1 6 9
83	"Feathertop" ..	196	196	..	..	1 6 6
20	F. W. Gough ..	189	123	66	..	1 5 10
82	G. B. Brown ..	183	183	..	..	1 5 6
79	"Orana" Poultry Farm ..	179	177	2	..	1 5 6
81	G. B. Brown ..	188	178	10	..	1 5 4
30	"Kadima" Poultry Farm ..	191	133	58	4	1 4 0
18	Mrs. Fretwell ..	180	180	..	..	1 3 10
74	W. Woods ..	157	139	18	..	1 2 7*
84	"Feathertop" ..	166	166	..	..	1 1 1
76	E. and D. O'Mullane ..	134	132	2	..	0 19 2
56	O. E. Reilly ..	91	88	3	..	0 16 5 (d)
35	T. A. Mentiplay ..	87	87	..	..	0 13 7 (d)
14	C. R. Fagg ..	47	46	1	..	0 9 10 (d)

* Stolen.

Section B—continued.

Pen No.	Name.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value
						£ s. d.

Class 2.—White Leghorns, Dry Mash.

	1st Prize, Champion Certificate—					
119	G. McDonnell, 150 Camberwell-road, Hawthorn East	272	268	4	..	2 1 4
	2nd Prize, Government Certificate—					
139	W. G. Wiseman, East Oakleigh P.O.	272	269	3	..	2 1 2
	3rd Prize, Government Certificate—					
112	T. A. Mentiplay, Somerville	269	269	..	..	2 0 8

OTHER COMPETITORS.

92	H. Beet	248	247	1	..	1 18 8
118	Mrs. D. M. Mackenzie ..	256	255	1	..	1 18 3
138	P. Vanten	262	217	45	2	1 17 7
120	G. McDonnell	248	242	6	..	1 17 7
151	E. Waldon	262	208	54	6	1 17 6
108	O. H. Gepp	247	245	2	..	1 17 4
95	R. R. Christie	234	234	..	..	1 16 10
90	N. Burston	249	227	22	..	1 16 8
127	T. J. Stevens	246	241	5	..	1 16 7
103	W. J. Flack	247	227	20	..	1 16 2
133	P. N. Tilley	284	66	218	3	1 16 1
114	Norman Meyers	240	219	21	..	1 15 11
101	C. R. Fagg	250	205	45	1	1 15 10
89	N. Burston	242	208	34	1	1 15 5
141	T. Ward	229	229	..	..	1 14 10
99	T. L. Eastaugh	237	236	1	..	1 14 10
94	W. Cook	244	186	58	1	1 14 6
150	J. S. Mills	231	228	3	..	1 13 10
91	H. Beet	247	170	77	..	1 13 5
117	Mrs. D. M. Mackenzie ..	217	210	7	1	1 13 1
130	H. W. Smith	233	194	39	..	1 12 4
88	J. Brighton and Son ..	205	205	..	..	1 12 1
149	J. S. Mills	213	213	..	..	1 11 5
93	W. Cook	203	201	2	..	1 11 1
115	A. McAdams	226	173	53	1	1 11 0
123	Mrs. A. Oxley	197	193	4	..	1 10 3
96	R. R. Christie	203	203	..	..	1 9 10

Section B—continued.

Pen No.	Name.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value
						£ s. d.

CLASS 2.—WHITE LEGHORNS, DRY MASH—continued.

100	T. L. Eastaugh	209	206	3	2	1 9 10
111	T. A. Mentiplay	211	211	..	..	1 9 9
125	O. E. Reilly	195	161	34	1	1 9 4
113	Norman Meyers	215	155	60	3	1 9 4
142	T. Ward	206	205	1	1	1 9 4
97	J. Dutton	207	207	..	..	1 9 3
152	E. Waldon	192	192	..	..	1 9 1
128	T. J. Stevens	185	175	10	..	1 8 7
143	W. Woods	204	196	8	1	1 8 6
105	Don Granter	225	153	72	..	1 8 3
131	C. Smart	204	202	2	..	1 7 11
87	J. Brighton and Son	178	178	..	..	1 7 3
126	O. E. Reilly	186	117	69	7	1 7 2
137	P. Venten	198	163	35	..	1 7 0
102	C. R. Fagg	183	174	9	..	1 7 0
109	F. Julian	205	133	72	2	1 6 6
104	W. J. Flack	190	188	2	..	1 6 5
144	W. Woods	186	186	..	1	1 6 5
136	Paul Thomson	197	177	20	..	1 5 7
85	H. S. Andersen	180	180	..	..	1 5 6
148	J. J. West	163	115	48	23	1 5 5
145	A. J. Wallace	215	7	208	32	1 4 7
121	H. R. McChesney	161	161	..	..	1 4 0 (d)
116	A. McAdams	180	161	19	..	1 3 11
110	F. Julian	171	166	5	..	1 2 7
134	P. N. Tilley	169	169	..	..	1 2 5
124	Mrs. A. Oxley	182	99	83	5	1 1 11
135	Paul Thomson	171	170	1	2	1 1 9
132	C. Smart	158	148	10	1	1 0 6
146	A. J. Wallace	148	117	31	5	0 19 0
98	J. Dutton	146	143	3	..	0 18 4
106	Don Granter	163	88	75	3	0 18 3
86	H. S. Andersen	133	133	..	..	0 17 9
147	J. J. West	78	63	15	55	0 13 5
122	H. R. McChesney	46	41	5	1	0 8 4
129	H. W. Smith	43	43	..	..	0 7 11 (d)
140	W. G. Wiseman	20	15	5	..	0 4 3 (d)
107	O. H. Gepp	..	..	..	..	..

Class 3.—All Light Breeds, other than White Leghorns, Wet Mash (Brown Leghorns).

157	F. W. Gough	200	132	68	..	1 8 4
155	Wm. Cocking	187	176	11	..	1 6 7
156	Wm. Cocking	145	145	..	..	1 1 2 (d)
158	F. W. Gough	157	135	22	1	1 1 0

Section B—continued.

Pen No.	Name.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
						£ s. d.

Class 4.—Black Orpingtons, Wet Mash

172	1st Prize, Champion Certificate— T. L. Eastaugh, Point Nepean-road, Highett ..	291	199	92	..	2 1 9
207	2nd Prize, Government, Certificate— H. G. Taylor, 19 Pleasant-street, Pascoe Vale ..	255	255	..	..	2 0 2
173	3rd Prize, Government Certificate— C. E. Graham, Portarlington	253	253	..	..	1 18 1

OTHER COMPETITORS.

206	J. Taylor	240	236	4	..	1 17 11 (d)
163	W. Cullen	249	249	..	..	1 17 10
170	C. C. Dunn	243	242	1	..	1 17 6
200	A. Siede and Sons	255	212	43	1	1 17 5
186	"Marville" Poultry Farm ..	239	232	7	1	1 17 4
174	C. E. Graham	249	247	2	..	1 16 7
212	A. J. Wallace	248	156	92	1	1 16 0
214	C. B. Walden	243	196	47	..	1 16 0
180	M. Julian	230	229	1	2	1 15 11
202	Roy Sanders	228	228	..	..	1 15 8
201	Roy Sanders	225	225	..	..	1 15 7
189	E. J. McChesney	238	217	21	..	1 15 6
204	"Shawville"	222	216	6	2	1 15 5
175	F. W. Gough	225	219	6	..	1 15 1
181	F. Julian	224	224	..	..	1 14 7
164	W. Cullen	225	211	14	3	1 14 7
199	A. Siede and Sons	218	203	15	3	1 14 0
190	E. J. McChesney	216	212	4	..	1 13 10
192	H. R. McChesney	216	216	..	1	1 13 6
198	W. J. Pearce	213	211	2	..	1 13 0
191	H. R. McChesney	224	195	29	..	1 13 0
197	W. J. Pearce	205	196	9	..	1 12 10
182	F. Julian	219	206	13	..	1 12 9
171	T. L. Eastaugh	206	202	4	1	1 12 3
169	C. C. Dunn	246	120	126	1	1 12 1
178	M. H. Hickey	210	210	..	..	1 11 7
167	R. R. Christie	195	183	12	1	1 11 5
195	"Navara" Poultry Farm ..	232	115	117	3	1 11 2
211	A. J. Wallace	202	196	6	1	1 10 3
193	J. A. Naylor	177	177	..	..	1 10 1
188	T. A. Mentiplay	204	185	19	..	1 9 8 (d)
213	C. B. Walden	187	183	4	..	1 9 6

Section B.—continued.

Pen No.	Name.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value
						£ s. d.

CLASS 4.—BLACK ORPINGTONS, WET MASH—continued.

161	"Blue Ribbon" Poultry Farm	209	93	116	1	1 8 10
184	M. G. Leech	206	206	..	..	1 8 10
177	M. H. Hickey	177	176	1	1	1 8 8
179	M. Julian	187	186	1	..	1 7 9
208	H. G. Taylor	189	187	2	..	1 7 2
165	L. C. Cropley	192	184	8	1	1 7 1
196	"Navara" Poultry Farm ..	169	154	15	1	1 6 11 (d)
194	J. A. Naylor	143	143	..	..	1 4 11
187	T. A. Mentiplay	167	162	5	..	1 4 10
183	M. G. Leech	170	163	7	..	1 4 6
205	J. Taylor	164	164	..	..	1 4 4
168	R. R. Christie	158	130	28	..	1 3 10
185	"Marville" Poultry Farm ..	130	130	..	..	1 3 7 (d)
203	"Shawville"	131	131	..	1	1 2 3
162	"Blue Ribbon" Poultry Farm	137	95	42	3	1 1 10
210	Mrs. J. Viney	117	68	49	5	0 17 1
176	F. W. Gough	84	83	1	1	0 16 0 (d)
209	Mrs. J. Viney	100	40	60	23	0 14 8
166	L. C. Cropley	30	10	20	8	0 4 6 (d)

Class 5.—All Heavy Breeds, other than Black Orpingtons, Wet Mash.

227	1st Prize, Champion Certificate— W. Cocking, Mickleham (Light Sussex)	258	199	59	..	1 18 1
224	2nd Prize, Government Certificate— J. C. Blyth, 25 Asquith-street, Kew (Rhode Island Red)	227	226	1	..	1 15 5

OTHER COMPETITORS.

229	W. E. Donovan (Rhode Island Red)	207	206	1	..	1 13 0
228	Wm. Cocking (Light Sussex) ..	206	168	38	1	1 10 2
232	F. W. Gough (Light Sussex) ..	219	104	115	7	1 9 6
222	J. D. Blyth (Rhode Island Red)	193	193	..	1	1 9 1
223	J. C. Blyth (Rhode Island Red)	185	185	..	..	1 7 11
225	N. Burston (Buff Orpington) ..	183	179	4	..	1 6 8
230	W. E. Donovan (Rhode Island Red)	148	148	..	..	1 2 11
221	J. D. Blyth (Rhode Island Red)	139	139	..	..	0 19 5
231	F. W. Gough (Light Sussex) ..	129	43	86	2	0 16 8 (d)
226	N. Burston (Buff Orpington) ..	105	6	99	15	0 10 3

For the Greatest Value of Eggs laid by Individual Birds in each Class of Section A.

Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
							£ s. d.

Class 1.—White Leghorns, Wet Mash.

3	1st Prize, Champion Certificate— C. C. Dunn ("Spero" Stud Poultry Farm), Moorabbin-road, Cheltenham ..	4	274	257	17	1	2 0 3.57
6	2nd Prize, Government Certificate— "Rosette" Poultry Farm (C. J. Ratz), Burwood and Dobson roads, Lower Ferntree Gully ..	4	250	244	6	1	1 18 3.20
1	3rd Prize, Government Certificate— W. H. Bamford, 74 Adelaide-road, Glenelg, South Australia ..	3	251	242	9	3	1 18 2.74

Class 2.—White Leghorns, Dry Mash.

18	1st Prize, Champion Certificate— A. J. Hill, "Sunraysia" Poultry Farm, Greensborough ..	1	253	233	20	..	1 17 7.07
20	2nd Prize, Government Certificate— C. M. New, "Rondaville," Marriot-street, Caulfield ..	5	247	235	12	..	1 16 9.19
16	3rd Prize, Government Certificate— A. Enticknap, 38 Serrell-street, East Malvern ..	4	243	238	5	1	1 16 7.33

Class 3.—Black Orpingtons, Wet Mash.

35	1st Prize, Champion Certificate— "Wingood" Poultry Yard (T. A. Goodwin), 8 Peel-street, Kew ..	4	290	267	23	..	2 4 5.72
35	2nd Prize, Government Certificate— "Wingood" Poultry Yard (T. A. Goodwin), 8 Peel-street, Kew ..	2	273	273	..	..	2 3 0.56
35	3rd Prize, Government Certificate— "Wingood" Poultry Yard (T. A. Goodwin), 8 Peel-street, Kew ..	3	270	270	..	..	2 2 2.98

**For the Greatest Value of Eggs laid by Individual Birds in each
Class of Section A—continued.**

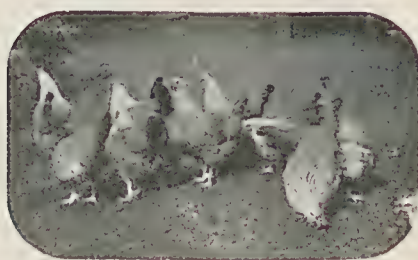
Pen No.	Name and Address.	Bird No.	Total Eggs.	First Grade.	Second Grade.	Under Weight.	Total Value.
							£ s. d.

Class 4.—Black Orpingtons, Free Choice.

	1st Prize, Champion Certificate—						
42	T. L. Eastaugh, Point Nepean-road, Highett ..	1	251	247	4	..	1 18 10·58
	2nd Prize, Government Certificate—						
45	F. M. G. Starbuck, Murrabit, via Kerang ..	4	220	218	2	1	1 14 0·03
	3rd Prize, Government Certificate—						
42	T. L. Eastaugh, Point Nepean-road, Highett ..	3	232	165	67	2	1 13 3·71

Class 5.—White Leghorns, Free Choice.

	1st Prize, Champion Certificate—						
51	W. Cullen, Werribee ..	3	241	232	9	2	1 15 11·81
	2nd Prize, Government Certificate—						
48	N. Burston, Bulleen-road, Camberwell ..	2	231	221	10	1	1 15 3·47



Section A.—Pen Certificates.

First Class Certificates of Merit have been awarded to those pens in Section A which averaged 200 first-grade eggs.

Section B.—Individual Birds.

First Class Certificates of Merit have been awarded to those birds which laid 240 first-grade eggs, and Second Class Certificates of Merit to birds which laid 220 first-grade eggs.

TABLE 1.—SHOWING TOTAL NUMBER OF EGGS LAID BY EACH BREED OF BIRDS DURING THE COMPETITION, THE NUMBER OF EGGS OF EACH GRADE, AND THE VALUES.

(NOTE.—No value has been allowed for underweight eggs.)

Description.	No. of Birds.	Eggs Laid.				Value.		
		1st Grade.	2nd Grade.	Under Weight.	Total.	1st Grade.	2nd Grade.	Total.
						£ s. d.	£ s. d.	£ s. d.
LIGHT BREEDS.								
Wet Mash.								
White Leghorns ..	148	29,068	3,295	177	32,540	217 16 4	19 6 3	237 2 7
Brown Leghorns ..	4	588	101	1	690	4 5 0	0 12 3	4 17 3
Anconas ..	6	990	22	4	1,016	6 17 8	0 3 5	7 1 1
Total Light Breeds, Wet Mash ..	158	30,646	3,418	182	34,246	228 19 0	20 1 11	249 0 11
Dry Mash.								
White Leghorns ..	119	20,295	2,743	189	23,857	153 7 4	15 8 10	168 16 2
Free Choice.								
White Leghorns ..	83	12,350	1,489	421	14,260	87 16 4	8 9 10	96 6 2
Total Light Breeds, Wet Mash, Dry Mash and Free Choice ..	360	63,921	7,650	792	72,363	470 2 8	44 0 7	514 3 3
HEAVY BREEDS.								
Wet Mash.								
Black Orpingtons ..	106	20,056	1,508	102	21,666	155 8 0	9 0 9	164 8 9
Buff Orpingtons ..	2	185	103	15	303	1 7 0	0 10 0	1 17 0
Rhode Island Reds ..	24	4,090	43	5	4,138	30 8 1	0 5 0	30 13 1
Light Sussex ..	4	514	298	10	822	4 0 11	1 13 8	5 14 7
Total Heavy Breeds, Wet Mash ..	136	24,845	1,952	132	26,929	191 4 0	11 9 5	202 13 5
Free Choice.								
Black Orpingtons ..	48	6,339	1,693	314	8,346	47 16 9	9 9 0	57 5 9
Total Heavy Breeds, Wet Mash, and Free Choice ..	184	31,184	3,645	446	35,275	239 0 9	20 18 5	259 10 2
Total all Breeds ..	544	95,105	11,295	1,238	107,638	709 3 5	64 19 0	774 2 5

TABLE 2.—AVERAGE NUMBER OF EGGS LAID PER BIRD AND THE AVERAGE VALUE PER BIRD, SHOWING THE VARIOUS BREEDS AND DIFFERENT GRADES.

Description.	No. of Birds.	Average Number of Eggs Laid per Bird.				Average Value of Eggs Laid per Bird.		
		1st Grade.	2nd Grade.	Under Weight.	Total.	1st Grade.	2nd Grade.	Total.
LIGHT BREEDS.								
<i>Wet Mash.</i>								
White Leghorns ..	148	196.4	22.2	1.2	219.8	1 9 4	0 2 8	1 12 0
Brown Leghorns ..	4	147.0	25.3	.2	172.5	1 1 3	0 3 1	1 4 4
Anconas ..	6	165.0	3.7	.6	169.3	1 2 11	0 0 7	1 3 6
Average ..	158	194.0	21.6	1.1	216.7	1 9 0	0 2 7	1 11 7
<i>Dry Mash.</i>								
White Leghorns ..	119	175.9	23.0	1.6	200.5	1 5 9	0 2 7	1 8 4
<i>Free Choice.</i>								
White Leghorns ..	83	148.8	18.0	5.1	171.9	1 1 2	0 2 0	1 3 2
All Light Breeds, Wet Mash, Dry Mash and Free Choice ..	360	177.5	21.3	2.2	201.0	1 6 2	0 2 5	1 8 7
HEAVY BREEDS.								
<i>Wet Mash.</i>								
Black Orpingtons ..	106	189.2	14.2	1.0	204.4	1 9 4	0 1 8	1 11 0
Buff Orpingtons ..	2	92.5	51.5	7.5	151.5	0 13 6	0 5 0	0 18 6
Rhode Island Reds ..	24	170.4	1.8	.2	172.4	1 5 4	0 0 2	1 5 6
Light Sussex ..	4	128.5	74.5	2.5	205.5	1 0 3	0 8 5	1 8 8
Average ..	136	182.7	14.4	.9	198.0	1 8 1	0 1 8	1 9 9
<i>Free Choice.</i>								
Black Orpingtons ..	48	132.0	35.3	6.6	173.9	0 19 11	0 3 11	1 3 10
All Heavy Breeds, Wet Mash and Free Choice ..	184	169.5	19.8	2.4	191.7	1 6 0	0 2 3	1 8 3
Average of all Birds in Competition ..	544	174.8	20.8	2.2	197.8	1 6 1	0 2 5	1 8 6



CIDER MAKING.

By F. de Castella, Government Viticulturist.

From most fruits palatable, mildly alcoholic beverages can be made. In earlier times nearly every English country home had its still-room, where the lady of the house supervised the making of such drinks as gooseberry, elder, cherry, and many other fruit wines, and also parsnip and cowslip wines.

The two fruits nature has most specially fitted for such treatment are, without question, the grape and the apple; the first gives us wine, the second cider.

We do not realize the enormous quantity of cider produced in the world. In the south of England it is the household beverage of the rural population, several million gallons being made annually. Though France is better known as a wine-growing country, she also produces much cider. In the northern departments, where grapes will not ripen, the apple takes the place of the vine, and cider is the popular beverage. In 1916, the French apple crop was a bumper one, and over six hundred million gallons of cider were made, or nearly half the average French wine vintage. In France, the cider yield is very variable, falling in some seasons to only thirty million gallons; the average is a little over three hundred million.

With us, likewise, the apple crop varies considerably from year to year. After a comparative failure last year, we now have more apples than we know what to do with, and much excellent fruit must go to waste.

Given a local demand for cider, this waste could be avoided. Unfortunately, the demand does not yet exist; cider is almost an unknown quantity with us. It is true that choice cider is put up by a few firms, but the quantity is small, and one is forced to admit that, even if our apple surplus were thus treated, the present demand would be inadequate to absorb it. It is a pity that our public does not know and appreciate this wholesome beverage, which is so admirably suited to our climate. A steady demand would prove a great boon to our apple industry. Cider, like wine, can be kept for several years. In the seasons of plenty, which occur periodically, enough could be made to satisfy the demand during the intervening lean years.

Professor Saintsbury describes cider as "extremely agreeable to the taste, one of the most thirst-quenching to be anywhere found, of no overpowering alcoholic strength as a rule, and almost sovereign for gout." Surely a good recommendation from such an authority.

It is in seasons of plenty such as the present, that the making of cider becomes of general interest. Apples are cheap, and in many private gardens householders have more on their trees than they know what to do with. The conversion of some of this fruit into cider is to the initiated a simple matter. It is just as easy to make cider from apples as wine from grapes. The two processes are conducted on exactly similar lines. All that is necessary is to crush the fruit.

Nature does the rest. The juice contains the necessary sugar, acids, &c., whilst on the outside of the fruit is the yeast organism which will transform the sugar into alcohol, thus converting the apple juice into cider.

The Method of Making Cider.

The art of making good cider lies in supervising this natural process, so that it may take place under the best possible conditions, the two most vital points being, first, absolute cleanliness, and second, the avoidance of acetic fermentation at any stage of the process. Concerning the first, little need here be said; cleanliness is just as essential in the cider cellar as in the dairy. As regards the second, it is well to explain that the first or vinous fermentation which transforms sugar into alcohol is soon followed by another fermentation, which converts the alcohol first formed into acetic acid, turning the cider into vinegar. Even if this fermentation has only occurred to a slight extent, the cider will be unsound with an unpleasant "pricked" taste. As this change can only occur in contact with air, it is easily avoided by keeping the cider, once the first fermentation is completed, in perfectly full vessels. There is no risk of acetification during the first or alcoholic fermentation, as the carbon dioxide gas this gives rise to effectually excludes the air.

A warning must also be given concerning the vessels used. These should be jars or casks. Metal vessels should on no account be used. Galvanized iron, lead, and copper are out of the question, being positively dangerous, as they are rapidly attacked by the acids of the apple. Iron, though non-poisonous, is a fruitful source of trouble in connexion with the "condition" or clearness of the cider, which is liable to unsightly discolouration, if it contains even a minute proportion of dissolved iron. Even the homely kerosene tin is an undesirable utensil; once its bright-tinned surface has become dull the iron is soon attacked. Iron and steel are no doubt used in apple mills, but the fruit should remain in contact with the metal for the shortest time possible.

There are various types of cider. They may be pale or dark in colour; dry or sweet; they may vary considerably in alcohol strength. These differences depend on the class of apple with which one has to deal, but in even greater measure on the treatment the fruit undergoes.

This article deals with the making of cider in small quantities by those who have a few surplus apples; in other words, home cider-making, rather than its industrial production. The process is, in principle, the same in either case, though for the second more elaborate plant is, of course, necessary. Hard or dry cider in which the sugar is completely fermented, being the simplest to make, will be mainly dealt with, the other sorts being briefly outlined.

In a small brochure on "*Home Wine Making*," obtainable free, on application to the Department of Agriculture, much is contained that applies equally to cider making, allowance being made for fundamental differences between the grape and the apple, such as the higher sugar content of the former and the greater difficulty in extracting the juice from the latter.

For those who object to beverages containing any alcohol, there are temperance cider or sterilized apple juice and apple vinegar. These are made on exactly similar lines to sterilized grape juice and wine vinegar, both of which are dealt with in the brochure referred to.

Cider apples are grown in England and France which are little known here. They yield heavy crops of small, hard, almost uneatable fruit, but excellent for this special purpose. Quite good cider can, nevertheless, be made from ordinary table and cooking apples, those that are firm and tart being preferable to soft mealy sorts. They should thoroughly ripen on the tree before being picked, or else be stored for a while to complete their ripening.

The strength of the cider depends on the sugar content of the apples, on the completeness of fermentation, and on whether or not any water be added. Such addition is not looked upon as fraudulent in cider, as it would be in wine. Some prefer "pure juice" cider, which is, of course, more alcoholic, whilst others favour a lighter type to which a little water has been added before fermentation. The Baumé hydrometer in use by our wine-makers is equally useful for cider. Its use is explained in "Home Wine Making." Seven deg. Baumé is frequent in our apples; this would, if completely fermented, mean an alcohol strength of 11 per cent. proof, or correspondingly less if sweet; in other words, incompletely fermented.

The actual making of the cider may be briefly outlined as follows: The apples must first be crushed or pulped to render possible the separation of the juice which is usually extracted by pressing, but also by a diffusion process. Sometimes the pulp is allowed to macerate or remain in a heap for 12 to 24 hours, to facilitate pressing. The strained juice is then allowed to ferment in a jar or cask with the bung left out; it thus effects its transformation into cider. This is, at first, a turbid or milky liquid. It is usually allowed to clear itself spontaneously, by sedimentation, the clear liquid being racked off its lees or dregs into clean containers. Several such rackings, at intervals of a few months, are usual before the cider is fit for bottling. It can be more rapidly cleared by filtration, but this is seldom practised on a small scale. From the time of completion of fermentation great care must be taken to avoid exposure to air; all storage vessels must be kept quite full.

Cider-making thus comprises the following distinct phases:—First, crushing or pulping, which may be followed by maceration; second, pressing; third, fermentation; fourth, and final, sedimentation, with occasional rackings.

The plant required is simple: a mill to pulp the apples, a press to extract the juice, and the necessary vessels for fermentation and storage.

In England, small combined mills and presses can be bought at a reasonable price, but owing to our neglect of cider, they do not seem to be obtainable here. A grape crusher of the old twin cylinder type can serve as a mill. If the apples are halved before being fed into it, they are drawn in and crushed more effectually. A simple substitute consists of a keg, with one head removed, in which pulping is effected by means of a wooden rammer.

The press is a little more difficult; some sort of press is indispensable; even more so than for wine; as apple juice needs more pressure for its extraction than grape juice. Hydraulic presses are the best, but they are costly. A small wine press is quite suitable. A lever press, as described in "Home Wine Making," that can be improvised at little cost, will do fairly well. Lard presses may also be used, but the metal receptacle should be replaced by a cage made of wooden laths. For fermentation and storage, kegs and jars are used on a small scale, and casks and cement vats on a large scale. Of the former, jars are most satisfactory for beginners; unless handled by persons experienced in washing and sulphuring casks, faulty tastes may result. Absolute cleanliness is the key note to success.

The apples having been well crushed, the pulp or "pomace" may be left to macerate for a day or two. If a somewhat deep or sherry colour is not objected to, pressing will then be all the easier. Otherwise, and for sterilized apple juice, it must be pressed immediately. A certain amount of fermentation occurs during maceration, unless the weather is very cold.

Pressing is the next operation. The old method of mixing straw with the pomace is undesirable, and has been generally abandoned. Press cloths of stout cotton fabric are used on a large scale, but they are not indispensable. When the flow of juice almost ceases, a further yield of juice is obtained by teasing out the pomace and again applying pressure. If a light cider is desired, a little water may be mixed with the "pomace" before the second pressing, the juice from which is added to that from the first. A third pressing, with a further addition of water, will extract most of the juice. If "pure juice" is being made, no water is added. In any case, the quantity of water added must not exceed one-quarter of the total juice, unless the first juice exceeded 8 deg. Baumé, when proportionately more water may be used.

The juice, strained through a sieve or through hesisan, is transferred to the cask or jar in which it will ferment. If filled to near the top, the froth, caused by fermentation, overflows through the bung-hole. If only filled to within a few inches of the top, the froth will remain in the cask, ultimately sinking to the bottom. Both systems have their partisans and good cider can be made either way. In cold weather fermentation may commence with difficulty; a starter is then advisable. This can be prepared by pulping two or three good sound apples in an earthenware jug, a few days beforehand, and keeping the juice in a warm room at a temperature of about 75 deg. Bubbles of gas will soon appear—an evidence that fermentation is about to commence. If the juice be squeezed through a clean cloth and added to the bulk fermentation quickly begins.

This process continues for several weeks, during which the container must not be tightly bunged or it would burst. A small sand-bag placed over the bung-hole will close it sufficiently. When a lighted match, lowered into the bung-hole, ceases to be extinguished fermentation is completed. The casks or jars must then be filled completely with some of the same cider, kept apart for the purpose. Henceforth the cider must be kept in vessels that are completely filled. It

is thus necessary to have several containers, some of which are quite small, in order to provide for the filling up which is essential if the cider is to be kept sound.

Rackings are necessary to separate the cider from its lees or dregs, which are much more abundant at the first than at subsequent rackings. This is usually done by syphoning off the clear liquid with a rubber hose, care being taken not to disturb the lees. The liquid thus syphoned off is transferred to a clean vessel of somewhat smaller capacity. After two or three such rackings, at some three months' intervals, the cider may be bottled. It is now fit for consumption, but, like wine, it improves with keeping.

Sweet cider is made by checking fermentation before the sugar is entirely transformed into alcohol. This can be done in various ways, the most usual being repeated filtration during the first fermentation. Sparkling cider results from bottling before fermentation has quite ceased. Both these types are more difficult to make than hard or dry cider, and need manipulations too complicated to be discussed now.

A BOOK ON WOOL CLASSING.

A Note by N. A. Bowman, Sheep and Wool Expert.

This book, whose sub-title, *A Handbook on Wool Classing*, explains its object, is the work of Mr. Clarence E. Cowley, Lecturer in Charge, Sheep and Wool Department of the Sydney Technical College.

Though the first 30 pages of the book are perhaps somewhat technical for the average reader, the work as a whole is good, and can be recommended to all desirous of gaining a general elementary knowledge of wool-classing.

I am inclined to think the weight of bales suggested by Mr. Cowley is on the light side—an addition of from 10 to 20 lb. might be made to the various weights specified; during the wool-selling season one meets too many light-weight bales.

There are a few details in the book that do not apply to Victorian conditions; for instance, the branding of the various lines of merino and comeback wool are not those which are used or recommended in our State.

The illustrations given are good, and more would be an improvement.

The publishers of the book are Messrs. Angus and Robertson, Sydney; its price is 15s.



WANGARATTA FALLOW COMPETITION, 1928.

Report of the Judge, W. B. Miller, M.Ag.Sc., Manager, Rutherglen State Farm.

The Wangaratta Agricultural Society is to be commended for its policy in continuing the fallow competition despite the seasonal difficulties experienced. It is in the face of such difficulties that the skill of the individual farmer is tried, and his methods tested.

Sixteen entries were received from eleven competitors in various parts of the Shire, and a high standard of cultivation was set. The fallows were judged during March, when all fallow land had been saturated by the abnormal summer rains. During January and February 972 points fell at Wangaratta, whilst an additional 337 points were registered in March. Such heavy rain made the treatment of fallow land difficult, but nevertheless most important. Weeds grew with amazing rapidity, and summer weeds such as couch grass, wild verbena and nightshade threatened to take possession of the fallows.

Although too fine a mulch is undesirable on the majority of the Wangaratta district soils, the better farmers cultivated their fallow once, twice, or even three times to keep it clean and in good order. It was impossible to forecast that March would be a wet month, and the correct policy of keeping the fallows clean by cultivation and heavy stocking was adopted.

The wet autumn provided an excellent opportunity to clean the ground before sowing the crop. It is a well-recognised fact that many weeds, notably wild oats, will not completely germinate without cultivation, even though the soil be well saturated. Many farmers who allowed a heavy weed growth to come on the fallow have been forced to disc deeply or to re-plough before sowing. There is little doubt that such action results in a reduced yield, and it is undesirable to have to spend time on such operations during the sowing period. It seems to be an unfortunate waste of energy to cultivate the fallow well for the first four months, and then to nullify this work by neglect at a later stage. The increased yield of wheat obtained due to one or two strokes with a Wimmera scarifier or some such implement should amply repay the cost of cultivation.

Too few working horses is often the explanation of neglected cultivation. In good grass country, as is found in North-eastern Victoria, where horses may usually be turned out in the paddocks when not working, it is economical for the wheat-farmer to have ample horse strength available. A cultivation at the right time is often worth two at a later period. It is seldom that a few extra horses above bare requirements will not pay for their upkeep, and, in an abnormal year like the present, they are invaluable.

The Competition.

Many classes of soil were entered in the competition, ranging from the light sandy loams at Taminick to the heavy red clay loams of Milava. The competitors appeared to be very enthusiastic this year, and all had cultivated their fallows according to their own convictions.

It is likely that the heavy February rains masked all previous workings and it is the cultivation after those rains that was really judged.

With the object of obtaining definite local information regarding the advisability of early cultivation of the fallow, it is advisable that in future the fallows should be judged either before harvest time or early in the new year.

Owing to the heavy rains previous to and at the time of judging, full points were given to all the fallows for moisture content. Allowance was also made for seasonal conditions in that a finer mulch than usual was allowed on the heavier soils. Dead weeds, indicating that the fallow had been very dirty prior to the previous cultivation, incurred loss of points.

TABLE OF AWARDS.

Best 30 Acres of fallow in one paddock.

The table of awards is given below:—

Competitor.	Locality.	Moisture.	Mulch.	Evenness of Cultivation.	Absence of Weeds.	Total.
Possible Points		25	25	25	25	100
N. Sandford	Baralma	25	25	24	25	99
I. Atkinson (2)	Taminick	25	24	23	24	96
H. J. Klemm	Londrigan	25	24	23	24	96
Docker & Richardson	Docker's Plains	25	23	23	25	96
Bailey Bros. (1)	Taminick	25	23	22	25	95
A. McDonald (2)	Docker's Plains	25	23	22	25	95
F. O'Keefe (1)	Docker's Plains	25	22	23	25	95
J. Pearce	Springhurst	25	24	22	24	95
I. Atkinson (1)	Taminick	25	24	22	23	94
R. A. Sadler (1)	Taminick	25	23	22	24	94
D. P. Jones	Milawa	25	24	22	23	94
A. McDonald (1)	Docker's Plains	25	22	22	25	94
F. O'Keefe (2)	Docker's Plains	25	21	23	25	94
R. A. Sadler (2)	Taminick	25	23	22	23	93
Bailey Bros. (2)	Taminick	25	23	21	24	93
R. M. Sammon	Docker's Plains	25	21	21	21	88

At the time of judging, Mr. N. Sandford's 30 acres of fallow was almost perfect. The soil is a friable red clay loam with a grey cementy sub-soil at a depth of from 6 to 7 inches. The paddock, of which it is a small part, has been in regular cultivation for at least ten years. Fine judgment must have been used to maintain the excellent cloddy mulch 2½ in. deep. The seed-bed was well consolidated and very level. No weeds were present. The cultivations given were as follow:—Ploughed 4 in. deep at the end of August, harrowed before and after the rain early in October, and disced in the direction of the ploughing after harvest. The summer rains gave an unusual opportunity to form a seed-bed by cultivating with the rigid tyne cultivator after both the January and February rains. Flat 6 in. points were used on the cultivator.

Mr. I. Atkinson, of Taminick, tied with Mr. H. Klemm and with Messrs. Docker and Richardson for second place. All three fallows were good, losing points only for slight defects.

Mr. Atkinson had the mulch fully 3 in. deep on his sandy fallow. As it is difficult to obtain a consolidated seed-bed on such soil, it is desirable to lessen the depth of mulch towards March. Each succeeding cultivation should be at a shallower depth. To do this, constant attention must be given to the tynes and points of the cultivator, so that the cultivation may be even.

Mr. Atkinson was unable to complete the fallowing of this paddock, but will cultivate and sow the lea ground when sowing the fallow. The fallow was ploughed 5 in. deep with the mouldboard plough in September. The rigid tyne cultivator with 5 in. points to a depth of 4 in. in the direction of the ploughing was used early in January, and two more cultivations were given after further rains.

Mr. Klemm has heavier soil, a red clay loam, with a strong red or yellow clay sub-soil beneath. The paddock was well worked, but the cultivation was not as even as that shown by the winner. Fallowing to a depth of from 5 to 6 in. took place in August, the harrows being used immediately to break down the comb. In October the fallow was spring-toothed lengthways, and in January across. After the heavy rains in February the rigid tyne cultivator was used, and again after rains early in March.

The system of cultivation followed here by Mr. Klemm may be modified to suit almost any season, and may be regarded as a standard method. The modifications of type of implement and number of summer cultivations are determined by the condition of the soil and the nature of the season.

The cultivator with a rigid flat foot has been very useful this season, when the fallow was beaten down so hard that the spring-tooth implements failed.

Mr. Richardson's fallow was very clean and evenly cultivated, but rather too fine in texture. He decided to cover all his fallow with the harrows in January and February, rather than cultivate part of it, but used the scarifier in March. The rainfall at Docker's Plains was, as usual, lighter than in Wangaratta.

The majority of the remaining fallows was good, and, with the additional scarifying to be given before sowing, should provide first-class seed-beds.

It is well for competitors to make careful records of the treatment given to their fallows and crops, rates of seed and manure, &c., so that reliable information may be obtained as a result of the competition.



POTATO FIELD CROP COMPETITION DAYLESFORD.

Report of the Judge, J. T. Ramsay, Potato Expert.

That potato-growers in the Daylesford district are taking considerable interest in the field crop competitions is shown by the fact that 27 entries, representing seventeen crops, were received this season.

Additional importance was given to the competition by virtue of the fact that, in addition to the cup given by the agricultural society, the president, Mr. James Gooch, also presented a cup.

Under the conditions, growers were permitted to enter the same crop for both trophies, and in the majority of cases this was done. There was very little disease noted in the crops submitted for judging, many of which were of very high quality. That these competitions are doing good is demonstrated, not only by the interest taken by the growers, but also by the improvement in the standard of cultivation which has taken place since their inauguration.

Improvement is particularly noticeable in regard to the purity of stocks brought about through the adoption of the practice of seed selection, and in the closer planting adopted by competitors now as compared with their former practice.

A fairly wide range in the points allotted to the various crops judged will be noticed, and it is hoped that the success achieved by some growers will be an incentive to competitors scoring the lower totals to improve their methods and bring their crops up to the level of those in the first flight. The season was very favorable to the production of full crops, and many excellent tonnages were recorded, again demonstrating the suitability of the Daylesford district soils for producing heavy crops of high quality, and also the ability of the growers to manipulate these soils.

Inquiries from competitors elicited the fact that few are using more than about a bag to the acre of superphosphate. The heaviest manuring was 3 cwt. From departmental tests at Musk and Wheatsheaf, in this district, results point to the advisability of using a combination of about 3 cwt. of superphosphate and 1 cwt. of ammonium sulphate. This appears to be the dressing which, in an average season, is likely to give the best results.

As already mentioned, much closer spacing is being practised than formerly, the majority of the growers favouring a close planting of about 30 rows to the chain. Several growers even bettered this by planting 32 and 33 rows to the chain, and only three competitors had less than 30. This is very strong evidence that growers are awakening to the fact that close planting gives not only a heavier yield, but a better sample and quality.

The standard of cultivation, as will be noted from the points given under this heading, was very good. In some instances a fair growth of weeds was noticeable between the rows, but in a season such as the

present one has been, with phenomenal autumn rains occurring at a time when the crop was in an advanced stage, this was to be expected, and reflects in no way upon the growers.

The points allotted to the various crops are tabulated hereunder.

Awards.

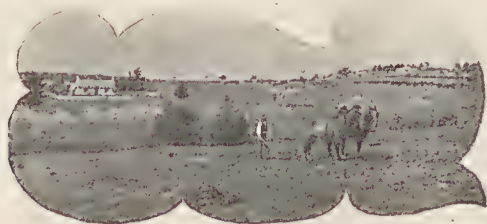
Name.	Rows per Chain.	Cleanness.	Evenness.	Quality.	Weight per Acre.	Points for Weight.	Total Points.
Possible Points ..	—	10	10	35	—	45	100
					tons cwt.		

SOCIETY'S CUP.

E. Bull ..	30	10	9	33	15 5	45	97
Gooch Bros. ..	32	10	9	33	14 11	43	95
Gooch Bros. ..	30	10	9	33	13 14	41	93
Bull Bros. ..	30	9	10	33	12 11	37	89
Balharrie Bros. ..	28	10	9	32	12 10	37	88
M. Courtney ..	32	8	9	33	12 17	37	87
Gooch Bros. ..	32	10	9	30	12 14	37	86
N. Mossop ..	28	8	8	30	11 10	34	80
Bull Bros. ..	28	9	9	31	9 0	27	76
W. Russell ..	28	10	9	31	8 15	26	76
J. McCracken ..	30	10	10	32	7 10	22	74
J. Pardon ..	30	7	7	31	9 0	27	72
B. McKinnon ..	33	9	9	30	6 15	20	68
J. Williams ..	30	7	9	31	7 0	21	68

GOOCH CUP.

E. Bull ..	30	10	9	33	15 5	45	97
Bull Bros. ..	30	9	10	33	12 11	37	89
M. Courtney ..	32	8	9	33	12 17	38	88
W. Russell ..	30	8	7	30	12 10	37	82
N. Mossop ..	28	8	8	30	11 10	34	80
J. Balharrie ..	30	4	7	28	13 2	39	78
J. McCormack ..	30	9	9	31	9 12	28	77
Bull Bros. ..	28	9	9	31	9 0	27	76
J. McCracken ..	30	10	10	32	7 10	22	74
J. Pardon ..	30	7	7	31	9 0	27	72
J. Williams ..	30	7	9	31	7 0	21	68
B. McKinnon ..	33	9	9	30	6 15	20	68
J. McCormack ..	28	9	9	31	8 0	24	73



STANDARD HERD TEST.

Report for Quarter ended 31st March, 1928.

In the following is set out the records of all cows which completed a lactation during the quarter. The number is 180, of which 130 qualify for the certificate.

The amount of butter fat required for qualification varies according to the age of the animal (up to 5 years at time of calving), the standards being as follow :—

Junior 2 year old (under 2½ years at time of calving) ..	200 lb. butter fat.
Senior 2 year old (between 2½ and 3 years at time of calving) ..	225 lb. butter fat.
Junior 3 year old (between 3 and 3½ years at time of calving) ..	250 lb. butter fat.
Senior 3 year old (between 3½ and 4 years at time of calving) ..	275 lb. butter fat.
Junior 4 year old (between 4 and 4½ years at time of calving) ..	300 lb. butter fat.
Senior 4 year old (between 4½ and 5 years at time of calving) ..	325 lb. butter fat.
Mature cow 5 years and over	350 lb. butter fat.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day of Test.	Milk.	Aver- age Test.	Butter Fat.	Previous Yields of Butter Fat in lbs.
H. Allez, Echuca West	1	..	Friesian	Rockbank Tulip 3rd	..	C.R.	13.5.27	273	lb. 16	7,523	3.48	lb. 201.80	204, 345
J. Anderson, Lyndhurst	2	1	Jersey	Canary 12th of King's Vale Linda 53rd of King's Vale	Mature Mature	10130 12852	7.4.27 24.5.27	273 273	19½ 16½	9,123 5,888	4.82 4.80	439.47 282.74	404, 489, 527, 507, 497
W. H. Atherton, Murraydale	1	1	Jersey	Tiny 3rd of Beverley	Jr. 2 yrs.	21007	8.6.27	273	8	5,565	5.06	281.81	200
W. K. Atkinson, Swan Hill	3	3	Milking Shorthorn	Fairy of Willow Park Gaylass of Willow Park Jessie of Willow Park	Mature Sr. 4 yrs. Mature	13599 13695 13856	31.3.27 18.5.27 11.6.27	273 273 273	48½ 18 23	15,084 8,373 9,018	4.28 4.13 3.73	645.81 345.88 358.97	380, 528, 570 353 305, 265, 344

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day of Test.	Aver- age Test.	Butter Fat.	Standard	Previous Yields of Butter Fat in lbs.
F. Austin, Lara	7	7	Jersey	Mercedes' Pansy 2nd of Avalon Noble's Pansy of Avalon .. Mercedes' Buttercup 6th of Avalon	Sr. 2 yrs. Jr. 2 yrs. Jr. 2 yrs.	18615 Vol. XV. Vol. XV.	19.5.27 6.6.27 10.6.27	273 273 273	lb. 21 20 201	5.72 5.91 4.73	lb. 430.70 323.22 299.23	lb. 225 200 200	323
				Noble's Queen 2nd of Avalon Mercedes' Beauty of Avalon Noble's Beauty of Avalon .. Mercedes' Pansy of Avalon ..	Jr. 2 yrs. Jr. 2 yrs. Jr. 2 yrs. Sr. 3 yrs.	Vol. XV. Vol. XV. Vol. XV. 16600	11.6.27 14.6.27 17.6.27 21.6.27	273 273 273 273	23 184	4.83 5.70 5.65 5.85	321.56 309.51 373.09 425.42	200 200 200 275	321, 314
W. H. Axford, Camperdown	5	5	Jersey	Lady Lander of Warendale Beauty 2nd of Leura .. Elsine of Leura .. Silver Queen of Leura .. Harmony of Leura ..	Mature Jr. 2 yrs. Jr. 2 yrs. Jr. 4 yrs. Sr. 4 yrs.	11254 21099 21100 15433 15432	28.4.27 16.5.27 26.5.27 12.6.27 21.6.27	273 273 273 273 273	14 164 18 19 22	6.70 5.47 5.02 4.91 5.65	356.61 261.05 263.60 336.22 422.28	350 200 200 300 325	424 315 360, 349
A. Balsille, Bendigo	1	..	Jersey	Cloverlea Lady Twylish ..	Jr. 2 yrs.	Vol. XV.	24.6.27	273	15	4.56	194.20	200	
Mrs. A. Black, Noorat	2	1	Jersey	Noorat Sunshine .. Garenn 6th of Warendale ..	Sr. 4 yrs. Jr. 3 yrs.	16219 17700	10.4.27 14.4.27	273 273	214 10	4.89 5.73	414.94 248.88	325 250	265, 240
S. Bolton, Man- nerup, via Geelong	2	2	Jersey	Rosie of Enterprise .. Trixie of Enterprise ..	Jr. 2 yrs. Jr. 2 yrs.	21146 21147	1.4.27 22.4.27	273 273	184 14	5.35 4.95	270.97 274.36	200 200	
D. Cameron and Son, Valencia Creek, via Boisdale	2	2	Jersey	Werrabee Island Sultana .. Kirsty 19th of Jerseyholm ..	Jr. 2 yrs. Jr. 2 yrs.	21161 18739	31.5.27 11.6.27	273 273	104 ..	5.69 5.91	230.15 286.72	200 200	
Jas. Clyne, U. Mafra West	2	2	Jersey	Mistletoe of Swansea .. Petal of Paisley ..	Jr. 2 yrs. Sr. 2 yrs.	21193 17722	30.3.27 13.5.27	273 273	174 ..	5.22 5.06	341.37 396.96	200 226	

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day of Test.	Milk.	Aver- age Test.	Butter Fat.	Standard Required.	Previous Yields of Butter Fat in lbs.
D. B. Cook, Loch	1	1	Jersey	Mirth of Wattle Vale	Jr. 2 yrs.	Vol. XV.	6.6.27	273	lb. 12½	4,598	5.62	lb. 258.56	lb. 200	
N. C. De La Rue, Weering	6	4	Jersey	Margie of Colac Larkspur of Colac Beauty of Colac Princess of Wyndarra Lucerne Vale Trixie Lucerne Vale Betsy	Sr. 3 yrs. Sr. 3 yrs. Jr. 3 yrs. Mature Sr. 2 yrs. Sr. 2 yrs.	21244 29240 14979 13762 18461 18678	1.4.27 8.4.27 12.4.27 2.6.27 5.6.27 14.6.27	273 273 273 273 273 273	101 273 273 12½ 12½ 24½	4,610 5,358 5,373 5,306 4,145 5,912	5.87 4.32 5.20 5.44 5.79 5.23	270.60 391.14 279.63 321.32 239.93 309.29	275 275 350 360 225 200	261.276 411 216.291 287.297 225 223
Department of Agriculture, Burnley	1	1	Jersey	Victoria Seasprite	Jr. 3 yrs.	C.R.	17.4.27	273	22	6,400	6.65	425.33	250	351
Department of Agriculture, State Research Farm, Werribee	1	1	Friesian	Victoria Cornuscat	Sr. 4 yrs.	1419	15.5.27	273	22	7,596	4.28	325.25	325	
Department of Agriculture, Werribee	7	6	Red Poll	Victoria Basra Victoria Longbird Victoria Ghetto Victoria Pele Victoria Avesta Victoria Vista Victoria Joan of Arc	Sr. 3 yrs. Jr. 4 yrs. Sr. 4 yrs. Sr. 2 yrs. Sr. 2 yrs. Jr. 3 yrs. Jr. 2 yrs.	1145A 1158A 1656A 1667A 1142A 1676A 1244B	1.4.27 7.4.27 25.4.27 29.4.27 15.5.27 25.5.27 27.5.27	273 273 273 273 273 273 273	171 131 131 191 17 17 24	5,981 5,267 7,199 7,121 6,293 5,651 7,664	5.05 4.73 4.39 4.34 4.77 4.42 4.62	301.84 248.75 315.76 308.76 209.41 249.73 354.34	275 300 300 325 250 250	306
Dickinson Bros., Sebastopol	4	4	Friesian	Ashby Phyllis 3th Jean 2nd of Ashby Ashby Patricia Pauline Ashby Queenie 3rd	Sr. 4 yrs. Mature Sr. 4 yrs. Sr. 4 yrs.	1171 1003 1168 1172	12.5.27 20.5.27 9.6.27 19.6.27	273 273 273 273	30 29 33 35	10,719 10,103 11,388 11,183	3.45 3.55 3.36 3.79	369.67 353.16 389.36 424.08	325 350 325 325	308.312 257.410 344.374 338.382

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day of Test.	Milk.	Aver- age Test.	Butter Fat.	Standard Required.	Previous Yields of Butter Fat in lbs.
Dookie Agricultural College, Dookie	5	5	Ayrshire	Dookie Pat.	..	14716	6.4.27	273	lb.	5,168	5.34	lb.	lb.	130
				Iris of Dookie	Sr. 3 yrs.	14714	24.4.27	273	14	5,600	4.44	275.99	275	
				Dookie Samphire	..	14720	24.4.27	273	22½	7,334	4.49	329.59	300	225
				Dookie Solomie	..	14719	10.5.27	273	20½	6,933	4.31	298.82	225	225
				Dookie Pearlle	..	14717	24.6.27	273	..	6,123	4.41	270.21	225	225
Allan J. El- dridge, Noorat	1	1	Friesian	St. Alban's Queen Beauty	..	2298	7.4.27	273	32	9,126	3.68	335.77	225	
A. E. Ellis, Archie's Creek	1	1	Jersey	Nellie of Blackwood Grove	..	18702	19.6.27	273	14	6,780	5.16	349.91	275	236
A. E. Enders, Box 78, Stanhope	2	2	Friesian	Burnbank Piortertje Bainfield St. Oram's Gem	Jr. 2 yrs. Jr. 3 yrs.	C.R. 2319	28.4.27 15.6.27	273 273	40 23½	11,708 8,693	3.26 3.82	381.67 331.90	200 250	
N. H. Enders, Stanhope	2	2	Jersey	Buttercup of the Wattles Dorothy of the Wattles		12910 45156	14.5.27 19.6.27	273 273	18 17	7,714 5,708	5.58 5.26	430.20 300.01	325 200	
A. Evans, Heywood	1	1	Jersey	Comfrey of Springhurst	..	16332	11.6.27	273	10½	8,835	4.89	431.99	275	
A. T. N. Facey	2	2	Ayrshire	Glengowrie Eunice .. Glengowrie Eleanor		13442 13441	2.5.27 17.5.27	273 273	11 12	4,962 4,902	4.21 4.16	208.78 203.95	200 200	
T. R. Findley, Leitchville	2	2	Jersey	Perree's Capture of Leven Brae Rose of Colac	Sr. 3 yrs. Jr. 3 yrs.	16265 14986	6.4.27 6.4.27	273 273	22½ 17	7,019 5,976	4.74 5.56	333.01 332.56	275 250	217 303

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days last in Day of Test.	Milk lb.	Milk. Test.	Aver- age Test.	Butter Fat.	Standard Required	Previous Yields of Butter Fat in lbs.
A. Fixter, Bolsdale	1	1	Jersey	Avonview Muriel ..	Jr. 2 yrs.	Vol. XV.	30.5.27	273	15½	lb.	4.76	lb. 235.29	lb. 200	
W. Fixter and Son, Bolsdale	1	1	Jersey	Creamy of Olivedale	..	18467	24.4.27	273	14	5.475	5.42	256.80	225	270
Flack and Gamble, Bewick	2	2	Friesian	Burnbank Woodcrest Marchion- ness Burnbank Mercedes Violet ..	Mature Mature	1522 1093	15.4.27 8.5.27	180 150	69½ 58½	12.765 10.635	3.37 3.29	429.57 350.41	350 350	588 288, 330, 600, 606, 599
Foster Bros., Bolsdale	1	1	Jersey	Noble's Queen of Avalon	Jr. 3 yrs.	16603	9.6.27	273	9	4.500	6.53	203.66	250	208
M. & W. A. Fran- cis, Kileunda	1	..	Ayrshire	Ena of Hill Crest ..	..	12081	16.5.27	210	4	2.063	4.62	95.36	275	184
G. Gange, Werribee	2	1	Ayrshire	Priscilla of Glenrowrie Glenrowrie Butterfly		11036 1339	3.5.27 30.5.27	273 240	.. 4	7.466 5.555	4.43 4.02	330.51 222.45	325 250	306
N. R. Gange, Berrybank	2	2	Ayrshire	River Glen Buntly .. River Glen Ada ..		14809 14804	31.3.27 3.4.27	273 273	14½ 11	5.453 5.270	4.82 4.81	263.05 263.39	225 225	
Gibson Bros., Trafalgar	2	2	Jersey ..	Spring Daisy of Hill Crest Attraction of Leathorne ..		17744 16271	12.5.27 20.6.27	273 273	17½ 16½	6.814 6.249	5.81 5.60	396.15 350.23	275 275	297 276
A. W. Gorman, Alexandra	1	1	Jersey ..	Laurel of Cathcart	..	12143	5.6.27	273	17½	7.226	4.09	295.37	275	246, 347

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day of Test.	Aver- age Test.	Butter Fat.	Standard.	Previous Yields of Butter Fat in lbs.
J. L. Handbury & Sons, Toora	4	4	Jersey ..	Lassie of Strathbow Starleigh of Tooravale Milkmaid of Tooravale Princess of Tooravale	Mature Sr. 2 yrs. Sr. 2 yrs. Sr. 3 yrs.	12305 19907 18729 18730	15.4.27 20.4.27 22.5.27 2.6.27	273 273 273 273	lb. 10,391 3,462 4,750 5,898	5.22 6.78 6.56 5.78	lb. 512.21 234.57 311.78 340.76	lb. 350 225 225 250	237, 408, 346, 610 205 264 347
F. Harrison, Frankston	1	..	Jersey ..	Donna of Somerville	Sr. 4 yrs.	17437	15.5.27	273	20	5.561	229.62	325	242, 276
T. Harvey, Boi- dale	3	2	Jersey ..	Empress 7th of Jerseyholm .. Empress 8th of Jerseyholm .. Lady Marge 5th of Jerseyholm	Jr. 2 yrs. Jr. 2 yrs. Jr. 3 yrs.	18734 18735 16652	9.4.27 5.6.27 20.6.27	273 273 273	8 13 15	2.694 4.406 7.275	139.23 216.36 426.90	200 200 250	304
R. P. Hastings, New Gisborne	2	2	Jersey ..	Dorothy 3rd of Banyule .. Silvermine 32nd of Banyule ..	Sr. 2 yrs. Jr. 3 yrs.	16689 16694	14.4.27 6.5.27	273 273	15 10	5.430 6.174	316.01 309.06	225 250	260 234
W. Henderson, Grasmere Share Farm	9	..	Ayrshire	Petsy 13th of Carracoorie .. Brownie 10th of Carracoorie .. Carracoorie Betsy 17th .. Coral 9th of Carracoorie .. Lucy 5th of Carracoorie .. Carracoorie Blanche 3rd .. Carracoorie Lucy 8th .. Blanche 2nd of Carracoorie .. Brownie 4th of Carracoorie ..	Jr. 4 yrs. Sr. 3 yrs. Sr. 3 yrs. Sr. 3 yrs. Sr. 4 yrs. Sr. 2 yrs. Sr. 2 yrs. Sr. 3 yrs. Mature	13597 13604 Vol. X.X. 13612 13624 Vol. X.X. 15860 13600 9325	7.5.27 25.5.27 10.6.27 10.6.27 11.6.27 13.6.27 14.6.27 19.6.27 20.6.27	273 273 273 273 210 12 14 273 273	124 17 17 17 4 12 14 131 23	4.401 5.943 4.640 5.468 3.315 4.650 4.574 4.529 7.106	102.49 208.75 184.02 233.05 211.03 192.35 192.58 194.48 287.44	300 275 250 275 325 225 225 275 350	127 124 202, 159, 280, 387, 390, 278
F. H. Howlett, Morwell	3	3	Jersey ..	Lily of Latrobe .. Dorothy 2nd of Banyule .. Sistine of Banyule ..	Sr. 3 yrs. Mature Sr. 4 yrs.	16657 11581 11605	6.5.27 15.6.27 18.6.27	273 273 273	17 29 23	5.481 7.882 7.140	276.78 402.25 355.75	275 350 325	296 187, 461 339
H. W. King, Gormandale	1	1	Jersey ..	Karoala Honeybee	Sr. 2 yrs.	21389	27.4.27	273	174	8.057	412.03	225	

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day Test.	Milk.	Aver- age Test.	Butter Fat.	Standard required.	Previous Yields of Butter Fat in lbs.
Longerenong Agricultural College, Doon	1	1	Ayrshire	Banksia of Longerenong Longerenong Fertile Magate of Longerenong Longerenong Ivy Anemone of Longerenong Phume of Longerenong Maid of Longerenong	.. Jr. 4 yrs. .. Jr. 2 yrs. .. Jr. 4 yrs. .. Jr. 4 yrs.	12431 15025 9792 15047 12430 13824 12434	7.4.27 15.4.27 17.4.27 2.5.27 7.5.27 13.5.27 5.6.27	273 273 273 273 240 273 210	lb. 4 9 4 4 7 4	lb. 7,224 3,837 7,293 4,556 5,265 5,199 4,470	4'34 4'68 4'78 4'20 4'26 4'25 4'38	lb. 313'34 179'74 348'68 191'31 224'53 221'03 195'90	lb. 300 200 350 200 300 250 300	283, 276 200, 315, 313 225, 219 251 190, 165
Mrs. L. Lowing, Tongala	3	2	Jersey ..	Pan-y of the Valley Tulip 2nd of the Valley Pansy 2nd of Jersey Vale		18794 15541 21424	11.5.27 31.5.27 10.6.27	273 273 273		4,531 6,927 5,613	4'69 4'34 5'37	212'39 300'76 301'50	225 300 200	228 229, 294
C. G. Lyon, Healdsburg	2	2	Jersey ..	Silvermine 29th of Banquale Silvermine 33rd of Banquale		14195 18812	19.4.27 14.6.27	273 273	201 21	9,611 8,012	5'02 4'87	482'41 391'29	300 200	330, 387
C. W. W. McAn- ley, Rochester	1	1	Jersey ..	Taranah Honeybee	..	Vol. XV.	8.5.27	273	16	5,385	5'75	309'51	200	
P. C. McHutlin- son, Paschen- dale, via Merino	1	..	Jersey ..	Thora of Jersey Meadows	..	11717	6.4.27	273	11	4,911	5'82	285'88	350	289, 324
G. A. McNabb and Son, Irre- willipe	3	3	Jersey ..	Alsyeke 3rd of Springhurst Avalon Mercedes Pansy 3rd Mercedes Queen of Avalon		16980 Vol. XV. 16601	5.5.27 5.6.27 19.6.27	273 273 273	15 13 ..	6,276 4,413 6,428	5'07 5'59 5'81	318'14 246'56 373'71	250 200 275	254 325, 367
P. J. Maloney, Tongala	1	1	Jersey ..	Wattle of Springhurst	..	5408	1.5.27	273	34	11,337	4'85	550'29	350	287, 320, 292, 380, 476, 582, 552, 433, 576

STANDARD HERD TEST—*continued.*

Owner.	No. completed Test.	No. Cattle.	Breed.	Name of Cow.	Age Standard.	Herd Book No.	Date of Calving.	Days In Test.	Milk last Day of Test.	Average Test.	Butter Fat.	Standard Required.	Previous Yields of Butter Fat in lbs.
R. Masters, Swan Hill	1	1	Ayrshire	Begonia of Sunnyside ..	Mature	7990	16.5.27	273	lb. 22	4.29	lb. 407.91	350	
S. H. Masters, Murraydale	2	2	Jersey ..	King's Vale Brunette 21st .. Lea Hurst silk Stockings 3rd ..	Jr. 2 yrs. Jr. 2 yrs.	Vol. XV. Vol. XV.	24.5.27 25.5.27	273 273	18 15	6.456 5.421	317.73 318.83	200 200	
W. H. Onley, Caldermeade	1	..	Ayrshire	Ida of Kelvin Grove ..	Jr. 4 yrs.	11589	20.4.27	273	..	7.607	251.41	300	
L. Padgett, Werribee	3	3	Friesian	St. Albans Roses Queen .. Braemore Marjory ..	St. 2 yrs. Mature	2605 App. 4. Vol. VIII.	23.4.27 12.5.27	273 273	31 20	11.739 11.870	424.77 427.42	225 330	
				St. Albans Queen Lady Mary	Jr. 4 yrs.	1678	26.5.27	273	29	11.982	389.22	300	225
W. Parbury, Warburton	5	3	Jersey ..	Verbena 8th of Brookfield .. Rosalind 9th of Brookfield .. Rosalind 11th of Brookfield .. Verbena 2nd of Brookfield .. Dawtie of Brookfield ..	Jr. 2 yrs. St. 2 yrs. Jr. 2 yrs. Mature Jr. 4 yrs.	18901 21563 18892 9619 15586	15.4.27 9.5.27 1.6.27 20.6.27 24.6.27	273 273 273 273 273	18 16 14 8 91	6.450 4.668 4.691 4.868 3.461	331.75 243.97 239.78 256.59 215.51	200 225 200 350 300	301 338
J. Phillips, Murraydale	1	..	Jersey ..	Empire of Peri ..	Jr. 3 yrs.	18913	24.5.27	273	12	3.408	205.90	250	309
J. Plattfuss, Tongala	1	1	Friesian	Burnbank Pietertje Girl ..	Jr. 2 yrs.	2387	2.4.27	273	..	7.962	266.74	200	
Mrs. M. A. Poole, Caldermeade	1	..	Ayrshire	Claremont Pride 2nd ..	Sr. 4 yrs.	15869	2.5.27	273	..	5.039	216.30	325	
F. Raggatt, Euroa	1	1	Jersey ..	Golly 2nd of Strathbow ..	St. 3 yrs.	16742	6.4.27	273	13	5.109	301.45	275	283

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Day Test.	Milk Test.	Milk. lb.	Aver- age Test.	Butter Fat. lb.	Standard lb.	Previous Yields of Butter Fat in lbs.
W. Regnier, Poowong	2	1	Friesian	Clover Hill Heather Belle ..	Jr. 4 yrs.	App. 4, Vol. VIII.	2.6.27	240	4	6,465	3.60	238.37	300	
				Clover Hill Beaumode ..	Jr. 3 yrs.	App. 4, Vol. VIII.	13.6.27	273	12	6,883	3.75	258.20	250	
J. D. Read, Springhurst	17	14	Jersey ..	Force 2nd of Springhurst ..	Jr. 4 yrs.	14258	0.3.27	273	11½	5,450	5.20	282.53	300	348, 435
				Shaster Daisy of Springhurst ..	Sr. 4 yrs.	14256	0.3.27	273	10	7,614	5.17	396.87	325	257, 186
				Tomato of Springhurst ..	Jr. 2 yrs.	18939	30.3.27	273	18	6,142	4.91	301.55	200	
				Nightshade 2nd of Springhurst ..	Sr. 4 yrs.	14255	4.4.27	273	13	6,885	6.06	417.05	325	333, 394
				Comfrey 2nd of Springhurst ..	Jr. 2 yrs.	21065	6.4.27	273	8½	3,443	4.99	171.94	200	
				Tulip 2nd of Springhurst ..	Mature	9667	6.4.27	273	16½	8,540	5.41	461.83	350	316, 278, 517, 438, 584
				Azalea 2nd of Springhurst ..	Jr. 3 yrs.	16961	14.4.27	273	15	5,613	6.25	350.96	250	312
				Romneya 2nd of Springhurst ..	Jr. 3 yrs.	16970	15.4.27	273	16	7,044	5.02	353.78	250	345
				Lodestone of Springhurst ..	Jr. 2 yrs.	21608	17.4.27	273	17	6,291	5.08	357.21	200	
				Laburnum of Springhurst ..	Sr. 4 yrs.	14249	17.4.27	273	10½	7,415	5.56	412.50	325	324, 421
				Snapdragon of Springhurst ..	Jr. 2 yrs.	18938	26.4.27	273	17½	6,078	4.73	286.73	200	
				Heather 3rd of Springhurst ..	Jr. 2 yrs.	18931	29.4.27	273	21½	6,927	4.56	315.61	200	
				Melliot of Springhurst ..	Mature	9659	5.5.27	273	15½	7,266	5.25	381.45	350	281, 350, 367, 507, 494, 507
				Countess 3rd of Springhurst ..	Jr. 3 yrs.	16965	17.5.27	273	23	7,668	5.26	403.23	250	405
G. Rowe, Kar- della	3	..	Jersey ..	Tulip 3rd of Springhurst ..	Jr. 3 yrs.	16973	30.5.27	273	23½	8,083	4.86	393.45	250	328
				Eremophylla of Springhurst ..	Sr. 2 yrs.	18929	3.6.27	273	11	3,273	6.38	215.26	225	263
				Narcissus of Springhurst ..	Sr. 2 yrs.	18935	13.6.27	273	23½	7,643	5.66	432.63	225	340
C. N. Runciman, Murraydale	1	..	Jersey ..	Duchess of Welbourne ..	Mature	13779	8.4.27	273	13	5,388	4.82	259.58	350	244, 271
				Sweet Pansy 5th of Melrose ..	Mature	7460	8.5.27	273	12½	4,763	5.15	245.32	350	246, 311, 362, 319, 316, 371, 351
A. H. Schler, Kernot	1	..	Jersey ..	Daffodils Dolly of Welbourne	Mature	13985	20.6.27	273	..	4,950	4.82	238.93	350	180, 245
				Silk Stockings 4th of Lea Hurst ..	Jr. 2 yrs.	..	6.5.27	273	9	3,197	5.23	167.17	200	
				Scotswood Stylish ..	Jr. 4 yrs.	14161	5.6.27	273	11½	4,758	4.49	213.74	300	249

STANDARD HERD TEST—continued.

Owner.	No. com- pleted Test.	No. Certi- ficated.	Breed.	Name of Cow.	Age Stan- dard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day of Test.	Milk.	Aver- age Test.	Butter Fat.	Standard required.	Previous Yields of Butter Fat in lbs.
H. A. Schier, Bamwin	1	1	Jersey ..	Preston Dairy Girl	Mature	12963	5.6.27	273	lb. 26	lb. 9,426	4'88	lb. 439'59	lb. 350	266, 304, 448, 503
A. Schlipalius, Kilmory Sth.	1	..	Jersey ..	Butterfly of Fairbanks	Jr. 2 yrs.	18962	1.5.27	273	11	3,407	5'43	184'99	200	
C. L. V. Sharp, Murrabit	1	..	Friesian	Burnbank Manor Kroons	St. 2 yrs.	2381	16.4.27	273	..	5,429	3'49	189'41	225	
Simpson and Son, Lower Fernree Gully	2	..	Jersey ..	Laura of Devon Park Peerless of Devon Park	St. 4 yrs. St. 4 yrs.	12898 12899	8.5.27 10.5.27	273 273	141 141	5,424 4,853	5'64 5'78	305'98 280'60	325 325	294, 231 242, 309
O. J. Syme, Macedon	2	2	Friesian	Bolobek Phoebe Eco Sylv. Belle	St. 3 yrs. Mature	1184 1256	25.5.27 14.6.27	273 273	9 42	10,063 18,531	3'79 3'43	381'85 636'36	275 350	349 566, 626, 518
Geo. Taylor, Caldermeade	1	1	Ayrshire	Bright of Glen-Achie	Mature	11160	2.6.27	273	201	8,840	4'14	366'54	350	
L. W. Thompson, Fakenham	2	2	Jersey ..	Pearl of Mendip Vanilla of Mendip	St. 2 yrs. St. 2 yrs.	18992 18993	8.4.27 17.6.27	273 273	18 19	5,545 5,293	4'81 5'66	266'90 259'76	225 225	276 264
H. L. Webb, Sunbury	1	1	Ayrshire	Alice of Holly Green	St. 4 yrs.	11493	9.6.27	273	211	8,028	4'28	343'88	325	260, 256, 336
S. K. Webb, Neerim North	1	..	Jersey ..	Pearl 13th of Melrose	Mature	13050	28.5.27	273	..	5,944	5'54	329'02	350	320, 397
A. C. Willis, Paschendale	2	2	Jersey ..	Gay Lass of Clover Flat Lassie's Pride of Carmy Dell	St. 4 yrs. Jr. 2 yrs.	17512 21741	9.6.27 17.6.27	273 273	23 131	7,782 4,643	4'83 4'65	375'94 216'08	325 200	282, 359

STANDARD HERD TEST—continued.

Owner.	No. completed Test.	No. Cents Heated.	Breed.	Name of Cow.	Age Standard.	Herd Book No.	Date of Calving.	Days in Test.	Milk last Day of Test.	Average Fat.	Butter Fat.	Standard required.	Previous Yields of Butter Fat in lbs.
J. V. M. Wood, Heldberg	3	2	Jersey ..	Lady Forma of Farrington ..	Jr. 4 yrs.	16360	16.5.27	273	151	5.51	320.06	300	
				Lady Jazz of Lebanon ..	Mature	9827	25.5.27	273	131	5.63	232.07	350	
				Madonna of Aberdour ..	Jr. 3 yrs.	18337	25.5.27	273	16	5.66	300.65	250	
W. Woodmason, Oakleigh	3	3	Jersey ..	Lassie Fowler 12th of Melrose	Str. 3 yrs.	16787	4.4.27	273	141	5.39	823.97	275	218, 367
				Laura 15th of Melrose ..	Jr. 4 yrs.	16788	15.4.27	273	18	6.15	413.90	300	400
				Reford Lady Aldan ..	Mature	11464	11.3.27	273	..	5.367	282.33	350	
				Fessie 37 of Melrose ..	Mature	14300	22.6.27	273	13	5.498	315.06	350	290, 427, 399
				Melrose Lassie Fowler 15th ..	Jr. 2 yrs.	Vol. XV.	26.6.27	273	11	5.97	221.48	200	

AGRICULTURAL CREDIT IN SOUTH AFRICA.

The *Agricultural Credit Act* 1926 is the first attempt of the legislature in South Africa to provide the individual farmer with some type of short-term credit which is suited to the nature of his business.

The Act, which is administered by the Land and Agricultural Bank of South Africa, empowers the board of that institution to divide the Union into areas called loan circles, and to establish, from time to time, an agricultural loan company in each of those circles.

Before reviewing the progress made during the first year of the Act operation, it would be convenient to give a *résumé* of the constitution, management, and functions of an agricultural loan company.

In dealing with the first point, it should be noted that the company depends on a subscribed capital for its funds; no company can commence operations until it has a subscribed capital of at least £5,000. In the case of only three companies have the public subscribed capital, and that only to a very limited extent, the balance, and in other instances the whole capital, being subscribed by the bank itself.

Provision is also made that credit societies must subscribe to the capital of the company an amount equal to 1 per centum of the amount of every bill discounted by such society for its members. The capital of a loan company is therefore steadily increasing, and when it has reached such an amount as is determined by the bank in each case, the company must apply 25 per cent. of further subscriptions by credit societies to the payment and retirement of all shares subscribed by persons or institutions other than credit societies.

The credit societies formed in any particular circle are thus afforded the opportunity of ultimately becoming the sole shareholder in the loan company established in that circle.

A loan company is managed by a board of directors appointed by the bank, which also appoints the secretary. The policy of the bank is to appoint local farmers of standing, men who are well acquainted with the people and the conditions obtaining in the circle, as directors of such a company.

The functions of a loan company are threefold—

1. To provide accommodation to the members of credit societies formed in its area, by discounting bills signed by members and endorsed by their respective societies.

2. To grant loans to individual farmers (including members of credit societies) against the security of grain, or other agricultural produce, represented by an elevator or warehouse receipt.

3. To receive moneys on deposit from shareholders and others.

The first object of a loan company, therefore, involves the formation of credit societies, and raises the question: What is a credit society?

A credit society is nothing more nor less than a borrowing club, consisting of not less than seven, and not more than fifteen, farmers, and its object is to grant accommodation to its members against their bills, which it discounts with the loan company.

The regulations of such a society are prescribed by the Act, and limit accommodation to its members to an amount not exceeding £200 multiplied by the number of its members; the maximum advance to any individual being fixed at £300.

The currency of these bills is not to exceed two years in exceptional cases; the policy of the bank, however, is to arrange the currency of bills so as to coincide with the harvest year.

These provisions are very well adapted to farmers engaged in purely agricultural pursuits; as regards the stock-farmer, especially in cases where it is desired to buy sheep, it is appreciated that it will not be possible to discharge the liability in full when a twelve months' bill falls due. But, having regard to all the circumstances, and a payment in reduction of the bill having been made, the bank agrees to a renewal of such a bill under favorable conditions. Small stock-farmers are thus placed in a position also to take advantage of the facilities offered.

A credit society may grant accommodation to its members for the following purposes:—

- (a) To enable a member to sow, reap, or dispose of a crop.
- (b) To purchase agricultural implements and machinery, live stock, feeding stuffs, seeds, fertilizers, and other farming requisites.
- (c) To erect buildings (including the purchase of the necessary material) for treatment or handling farm produce, and for housing live stock.
- (d) To pay wages for and costs to be incurred in reaping, threshing, or disposing of crops.

The members of a credit society are jointly and severally liable for the debts of the society. Owing to the fact that the nature of this liability is not thoroughly understood by the farming community, this provision to some extent acts unfavorably against the success of the whole scheme. Although the liability is unlimited, there is considerable security in the fact that the member does not personally handle the money advanced; any stock or implements purchased remain the property of the society until the debt has been repaid, and, if disposed of before that event, the member is criminally liable; in addition, the society has a lien on crops produced with the aid of seed, fertilizer, stock, or implements supplied.

Up to the present no loan company is functioning as regards the second object of such companies, namely, "to grant loans to individual farmers against the security of grain represented by an elevator or warehouse receipt." This question involves the erection and control of warehouses, as well as the "co-operative" sale of produce against which loan companies have made advances, and is now receiving attention.

The machinery for this part of a company's business will be in order to deal with next year's crop.

Very little attention has so far been given to the third object of loan companies, viz., "to receive deposits from shareholders and others," and no business has resulted.

The Land and Agricultural Bank of South Africa acts as bankers to the loan companies, each of which is required to maintain a reserve fund equal to 25 per cent. of its paid-up capital, and companies obtain further funds by re-discounting with the bank bills endorsed by credit societies or signed by individual farmers.

In areas not as yet served by agricultural loan companies, it is possible for a number of farmers (being not less than seven) to form a co-operative society for the purpose of obtaining a loan on security of their joint and several liability from the Land and Agricultural Bank of South Africa, and to supply the members of the co-operative society

with live stock and implements by means of this money under a hire purchase contract.

Similar societies can be formed in any part of the Union of South Africa for the purpose of supplying members with well bred cattle and sheep. The societies can also keep bulls and rams for stud purposes for the convenience of members, the members paying a fixed fee for each service.

Nearly all co-operative organizations formed in the Union of South Africa for the purpose of selling members' produce advance to persons who have delivered produce a certain percentage of the valuation of the produce delivered. Should the organizations need more money for this purpose than they have available, they raise it by means of seasonal loans from the Land and Agricultural Bank of South Africa. Some organizations have, however, found it more convenient to raise any loans needed for this purpose from the commercial banks.

Advances of this nature are only made after the produce has actually been delivered to the co-operative organization, and are based on the valuation placed on the produce by the board of directors of the co-operative organization. The advances are usually between 40 per cent. and 60 per cent. of the valuation.

Co-operative organizations also borrow their capital requirements, if not wholly, then partly. Loans of this nature are very seldom obtained from any other banking institution than the Land and Agricultural Bank of South Africa. Naturally, satisfactory security must be furnished for any loans raised. The security consists of the assets of the co-operative organization plus the joint and several liability of all the members in the case of a co-operative society with unlimited liability, and in the case of a co-operative company with limited liability the unpaid share capital, together with any contingent liability voluntarily undertaken by the members.

In the past it was also the practice of a number of co-operative organizations to supply members with bags and fertilizers on short-term credit. Usually the co-operative organization concerned obtained a seasonal loan from the Land and Agricultural Bank of South Africa in order to finance such transactions. With the advent of the loan companies and credit societies already referred to, the Land Bank has, however, intimated that in future it would probably not be prepared to grant a seasonal loan for this purpose to co-operative organizations working in areas where farmers can obtain these credit facilities through their credit society. It can thus be expected that in future co-operative organizations will grant their members less credit for this purpose, and that this practice will therefore ultimately disappear altogether.

Besides these facilities granted to groups of farmers, the Land and Agricultural Bank of South Africa also gives financial assistance to individual farmers for the purpose of generally effecting improvements on their farm, such as farm buildings, fences, dipping tanks, the clearing of land for cultivation, the planting of trees, orchards, and vineyards, the purchase of stock and implements, &c. To be able to obtain these advances the farmer must financially be strong enough to provide the necessary security. A first mortgage over the farm is generally required, and advances not exceeding 60 per cent. of the value of the farm may be obtained.

The Land Bank also helps farmers who want to buy land but have not sufficient money. The bank must be satisfied that the price to be paid for the land is fair and reasonable, and will advance only up to 60 per cent. of the value of the land. The security is also a first mortgage bond.

The interest on these loans varies from time to time, and depends on the rate of interest which the bank at the time the loan is granted must itself pay in order to obtain funds. At present the rate of interest to farmers is 6 per cent. per annum.

A fundamental principle of the Land and Agricultural Bank of South Africa is that a farmer must not only pay the yearly interest, but must also each year reduce the capital loan. The total number of years allowed for repayment of the loan varies according to the nature of the loan.

In connexion with its settlement schemes, the Department of Lands also affords settlers under these schemes various credit facilities.

A GIANT TREE LUCERNE.



The tree lucerne illustrated above is growing at the home of Mr. W. L. Harris, Jubilee Lake, Daylesford. Its great height is indicated by the size of the man standing underneath the branches. The dimensions of the tree, which is 28 years old, are—

Circumference of trunk, 8 ft. 9 in.

Circumference of biggest branches, 4 ft. 6 in., 3 ft. 10 in., and 2 ft. 11 in.

Height, 30 feet.

Branch spread, 54 feet.

ORCHARD AND GARDEN NOTES.

The Orchard.

E. E. Pescott, F.L.S., Pomologist.

PLANTING.

The time has now arrived for the general planting of deciduous fruit trees. The soil should have previously been well ploughed and subsoiled, and, as far as possible, drained. To insure satisfactory results, it is essential that the orchard be subsoiled. Where expense is a consideration, drainage may be left for subsequent years, but once the orchard has been planted, it will be impossible to subsoil.

When planting out, the distance between the trees will be determined by the kinds to be planted. For ordinary deciduous fruiting trees it is the custom in this State to plant them 20 feet apart in the rows, the rows also being 20 feet apart. Results have proved this to be a satisfactory practice. Almond trees may be planted 15 or 16 feet apart each way, while walnuts and citrus, owing to their spreading habit, often require a distance of 30 feet.

Deep planting is not advocated, the general practice being that the depth of planting in the nursery should be followed. If holes be dug, they should be shallow, the bottom being merely loosened to allow a comfortable friable bed for the tree roots. A good practice is to dig the whole strip along which the trees are to be planted, merely removing sufficient soil afterwards when planting. Another satisfactory custom is to plough furrows 20 feet apart, and to plant the trees in the furrows, filling in the soil over the roots and trampling well down.

Before planting, the roots of the young trees should be well trimmed, shaped to an even form, and cleanly cut. As the result of their removal from the nursery beds, the roots are generally more or less damaged, and numbers of the fibrous roots, becoming dry, shrivel and die. These all require a clean trimming. Then it is often desirable to remove some of the roots so as to balance the root system. The trimming of the roots gives the young tree a clean root system, and it is enabled to establish itself with young, vigorous roots.

After planting, the top should be well cut back, so as to leave three or four arms, with three or four buds on each. Where it is not possible to have this number of arms or limbs it is frequently advisable to cut back to one stem, allowing the buds to break out strongly and frame the tree after planting. In some countries, the custom of not cutting back the trees the first year is favoured. Local experience has not resulted in favour of this practice, as it is found to be inadvisable to unduly strain the young tree by leaving a heavy top to be supported by the weak-growing root system.

A number of good commercial fruits have been found to be either wholly or partially self-sterile, requiring other varieties near them to enable them to set their fruit. For this purpose it is necessary that the bloom periods should be somewhat coincident.

SPRAYING.

The time has now arrived when it is necessary to spray for the following pests—scale insects, woolly aphis, and the bryobia mite. The use of red oil has been advocated for these pests, and, as well, crude petroleum, kerosene and other oil emulsions have proved satisfactory.

The lime-sulphur spray is also one of the most effective of sprays for winter use. It is lasting, searching, and being a fungicide as well as an insecticide, is much favoured by growers as a dual spray.

Nicotine sulphate in any form, such as Nicotox or Black Leaf 40 may also be used.

A spray made up as follows has been found effective:—One pound of soap dissolved in 1 gallon of boiling water; to this is added 1 gallon of red oil, which should have been thoroughly emulsified; then 1 pint of nicotine sulphate is stirred in, and 80 gallons of water added. In this way mixture sufficient to spray 100 trees can be made. If hard water be used 1 oz. of washing soda should be added. Winter is advised as the best time for spraying.

GENERAL WORK.

All ploughing should now be completed; if not, it should be finished before spraying and pruning operations are proceeded with.

Any autumn manuring or liming should also be now carried out. This, too, should be finished before spraying or pruning. Before spraying with oils or with lime sulphur wash, all rough bark on apple and pear trees should be scraped off. This will mean the certain destruction of any codlin moth larvæ hiding underneath.

The Vegetable Garden.

If not previously done, asparagus and rhubarb beds should be well cleaned out, and a top dressing of manure given. To insure good drainage, the soil from the paths, or between the beds, may be thrown up on the beds, so as to deepen the surface drainage, and to consequently warm the beds. This will mean earlier growths. A heavy dressing of manure should be given, and the beds well and roughly dug over.

Plant out seeds of tomatoes and the pumpkin family in the frames; and sow in the open seeds of peas, lettuce, spinach, broad beans, radish, onions, carrot and leek. Asparagus crowns, rhubarb roots, tubers of Jerusalem artichokes, shallots and onions may now be planted out. Celery should still be earthed up and limed, taking care not to have the beds too wet.

The Flower Garden.

General cleaning up and digging will be the work for this month in flower section and shrubbery. Where the soil is heavy or sour, or where sorrel is plentiful, the garden should be given a heavy dressing of fresh lime, a fair dusting being applied all over the surface. Lime should not be used in conjunction with leaves, garden *débris*, leaf-mould, stable manure, or any other organic matter used for humus. These should be

first disposed of by digging well into the soil; then shortly afterwards a top dressing of lime may be given. Should no humic material be used, the lime may be dug in with the autumn digging.

In cleaning up gardens, all light litter and foliage should be either dug in, or, better still, it should be placed in an out-of-the-way corner to form a compost heap. Leaf-mould, well rotted, is especially useful in any garden, particularly where such plants as Azaleas, Rhododendrons, Lilliums, &c., are grown, or for pot plant work it is exceedingly valuable. Lime must be kept away from these plants. In forming the compost heap, no medium whatever should be added to help the rotting down of the leaves unless it be a little sand. Any chemical added will render the mould unsuitable for its special objects.

Any hardy annuals may be planted out, such as stocks, pansies, wall-flowers, &c., and cuttings of roses and hardwood shrubs may also be planted. In planting out cuttings it is very important that all the eyes should be removed from the part of the cutting which is to be below the ground. If this be not done, there will always be the subsequent danger of the plant suckering.

Roses and any summer and autumn flowering shrubs that have finished flowering may be pruned. If the spring flowering shrubs have not previously been pruned, they should be allowed to remain until after the next flowering season. This especially applies to such plants as Spireas, Philadelphus (Mock Orange), Deutzia, Prunus Mume, and other early flowering shrubs. To prune these now would mean the certain loss of a great proportion of their flowers.

REMINDERS FOR JULY.

LIVE STOCK.

HORSES.—Those stabled and worked regularly should be fed liberally. Those doing fast or heavy work should be clipped; if not wholly, then trace high. Those not rugged on coming into the stable at night should be wiped down and in half-an-hour's time rugged or covered with bags until the coat is dry. Old horses and weaned foals should be given crushed oats. Horses at grass will greatly benefit by the addition of either hay or chaff, oats, and bran. A lick, previously recommended, should be available for all horses at grass. Old and badly conditioned horses should be given some boiled barley or linseed. Mares now approaching foaling will require careful attention, and should be kept under constant observation. It is not advisable to have mares fat at foaling time, nor is it wise to have them poor; they should, however, be kept in good working condition. The practice of working mares in shafts until they are about to foal is strongly condemned, as such a course may give rise to many foaling ailments with consequent loss of foals, and, at times, that of mares also. Commence preparing stallion for season, especially if worked.

CATTLE.—Cows, if not housed, should be rugged. Rugs should be removed and aired in the daytime when the shade temperature reaches 60 degrees. Give a ration of hay or straw, whole or chaffed, to counteract the purging effects of the young grass. Cows about to calve, if over fat, should be put into a paddock

in which the feed is not too abundant. Newly-calved cows should be fed liberally to stimulate milk flow. Cows may now be served for autumn calving. Calves should be provided with warm, dry shed and liberally fed. Keep feeding utensils scrupulously clean to avoid digestive complaints.

PIGS.—Supply plenty of bedding in warm, well-ventilated styers. Keep styers clean and dry. Sows should be given a grass run.

POULTRY.—Mating of birds intended for breeding purposes should receive immediate attention. Ten to twelve second-season Leghorns or any other light breeds, or eight to ten of the heavier birds, such as Orpingtons, Plymouth Rocks, and Wyandottes (preferably in their second year), with a vigorous unrelated cockerel will be found satisfactory. Table birds bred in March or April will pay handsomely prior to the Cup Carnival. A tonic in drinking water as a preventive against chicken pox and other ailments is advantageous.

CULTIVATION.

FARM.—Finish sowing barley, peas, and beans, and late white oats in backward districts. Trim hedges. Fallow for potatoes, maize, and other summer crops; in early districts, plant potatoes. Graze off early crops where possible.

VINEYARD.—Proceed with pruning, burning off, and ploughing. Deep winter ploughing is essential. Do not delay it until spring. Dormant roots may be cut with impunity but cutting the active root is injurious. As a precaution against Anthracnose (Vine Black Spot), "swabbing" of susceptible varieties (sultana, &c.), with acid iron sulphate solution, just before bud-burst, is recommended. Bulletin describing treatment will be posted on application. Complete, as early as possible, the application of manures if not already done. Mark out land for new plantations. If ground is in good order and not too wet, proceed with plantation of young vines (unpruned). Remove cuttings or scions from vines previously marked, and keep fresh by burying horizontally in almost dry sand in cool, sheltered place. Permanently stake or trellis last year's plantations.

Cellars.—Rack all young wines, whether previously racked or not. Rack older wines also. For this work choose, as much as possible, fine weather and high barometer. Fill up regularly all unfortified wines. This is a good time for bottling wine.



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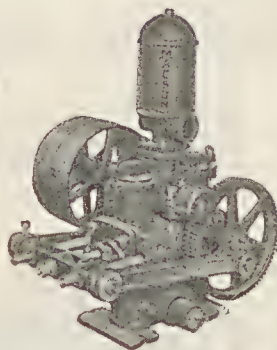
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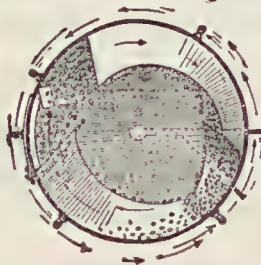
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DEPARTMENT OF AGRICULTURE

POULTRY FOR SETTLERS

Orders for Cockerels for delivery from March may now be booked from the Poultry Pens at the Central Research Farm, Werribee
Settings of Eggs can be supplied in season
1st July to 1st October orders are booked in rotation

WHITE LEGHORNS

No. 1—Pure Cosh World's Record Strain.

" 2—From Single Tested Hens with scores of 260 to 285 eggs, Single Mated to Cocks bred from Hens with scores of 275 to 301 eggs.

UTILITY BLACK ORPINGTONS (Founded on Christie and Cullen Strains)

No. 1—From Single Tested Hens with scores of 256 to 284 mated to Cockerels bred from Hens with scores of 272 to 313 eggs.

" 2—From Hens bred from above mated to Cockerels bred from Single Matings.

RHODE ISLAND REDS Pure Dalrymple

From Hens with scores of 250 to 275 eggs, mated to Cockerels bred from Hens with scores of 264 to 292 eggs in 12 months.

For prices and particulars apply to The Manager, Research Farm, Werribee

The Separator that's Different

The Wonderful BALL - BEARING

BALTIC

IT doesn't LOOK different. BUT IT IS! And the difference represents the most amazing advance that has ever been made in Separator construction.

FIRST—there is the wonderful Baltic Ball-Bearing Spindle, built on an entirely new principle. It has none of the old familiar sources of trouble and expense—NO neckbearings, NO neckbearing springs, NO brass bushings, NO steel spindle point. The bowl is carried on a hollow steel casing, which revolves on BALL BEARINGS round a FIXED SPINDLE; Result—a much steadier bowl and better skimming than ever!

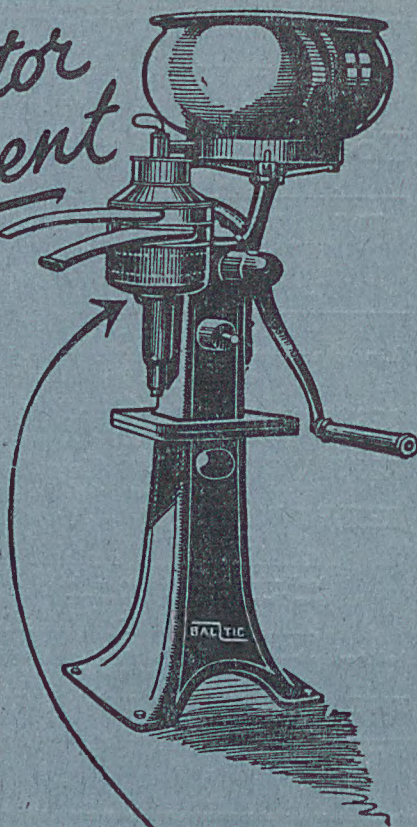
THEN—there is the Baltic Ball-Bearing Worm Wheel Shaft, the famous Baltic Gyroscopic Bowl, and many other refinements which place the Baltic in a class by itself and years ahead of any competitor—absolutely different from any other so-called Ball-Bearing Separators you ever heard of.

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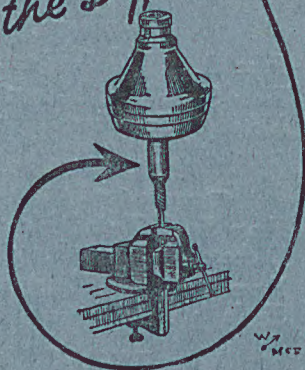
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*Here is
the Difference*



Note that, though the Spindle is held in a vice, the Bowl can still be easily revolved at a finger's touch.

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